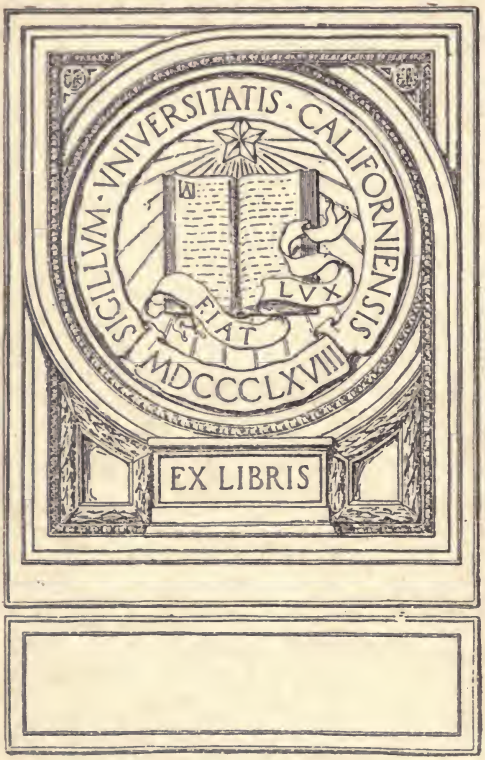
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The People of Mexico

Who They Are and How They Live

BY

WALLACE THOMPSON

HARPER & BROTHERS PUBLISHERS
NEW YORK AND LONDON

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HISTORY I

UNIV. OF
CALIFORNIA

THE PEOPLE OF MEXICO

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A-V

To
My Father
ALTON HOWARD THOMPSON
Who in the folklore that he gave me in
my childhood taught me that science
could be as joyous as romance.

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PREFACE

THIS book offers itself as an Anatomy of Mexico. It deals with one of the grievously sick nations of the world, in the diagnosis of whose ills our greatest lack has not been—Heaven save the mark! —for minute descriptions of her pains and aches, nor yet for elaborate explanations of her afflictions and suggested panaceas. Our deficiency has been rather in understanding of the patient, how she is made and how she has been living and thinking, and in honest appraisal of her antecedents.

The information vital to such understanding has been almost inaccessible. Much was scattered through many books, from government statistics to records of travel, but even there surprisingly little of it has existed in easily assimilated form. Writing and talking of Mexico as I have done for nearly twenty years, I have come to feel that there is no greater single need of those who would understand the Mexican situation of yesterday and to-day, and to-morrow as well, than a work that strives seriously to set down and interpret the fundamentals of the national anatomy. It is that need which this book seeks to fill.

Its materials are from many sources; their ar-

rangement, digestion, and interpretation are almost entirely mine. Of the two parts, the first, save for its statistical tables, is largely original, the second a compilation and interpretation of available data. The first part, in its frank discussion of the race question, will perhaps be challenged, but there I have said nothing that Mexicans themselves do not whisper. Nor have I approached this very vital subject with anything but the friendliest appreciation of those always *simpatico* and understanding gentlemen, the Mexican mestizos, who have, many of them, sought so sincerely to solve their country's problems. The historical data in this part I have taken largely from Bancroft, always authoritative and always sound, much of the material on race from Bandelier; the more recent studies I have considered as supplementary, for many of them are still controversial, and, moreover, this question of race and its manifestations is one of the fields to which future research has yet to contribute much. The statistical material in the first section, as in the second, is necessarily from Mexican sources, whose reliability is always questionable, although, where comparisons were not anticipated by the Mexican editors of the official reports (as in my vitality tables) much significant matter has been discoverable. The rearrangement of the data, which had always to be made, puts a large amount of statistics for the first time in usable form.

The second part of the book, dealing with living conditions, has made use of source material which could be reached. To this end the invaluable files

of the Doheny Research Foundation, covering practically everything printed on Mexico that is available in the United States, were used freely; to them were added statistical and other data gathered personally, my own notes being the basis for most of the facts and observations in such chapters as Foods, Housing, Labor, etc.

The list of those to whom I owe gratitude for tangible aid must of necessity, in a work of this sort, be very long, and includes a host of personal friends whose contribution could not be appraised. Of those who have actually helped toward the making of the manuscript, I would name Miss Ida A. Tourtellot, my associate in the original work of the Doheny Research Foundation, a valued colleague and a sympathetic critic, and with her the many other members of the Foundation who were truly my confrères, Prof. Ellsworth Huntington, to whom I owe much of the material on climate, Mr. Madison Grant for important suggestions on the general subject of race, Dr. Norman Bridge, for his invaluable criticism and inspiration, and Mr. Edward L. Doheny, for his faith in the sincerity of my study and his genuine devotion to the best interests of Mexico.

WALLACE THOMPSON.

NEW YORK, *November 1, 1920.*

PART I

WHO THEY ARE

THE PEOPLE OF MEXICO

I

THE MEXICAN TYPE

WHAT is a Mexican? What is his racial, his cultural background? Whence did he come? What did he bring with him from beyond the glow of his recorded history? What type has he truly been through the strenuous periods since he emerged from the melting pot of the three-hundred-year-long Spanish régime? What is he to-day and what is he to be?

These are questions which even the most factual students of Mexican history are coming to ask themselves. They are questions of the impersonal observer of international affairs, and of the patriotic American or European who grasps dimly that this anomalous people is having a disproportionate influence upon the social and industrial trends of the world. They are questions which Mexicans themselves ask, with a growing frankness into which the dangerous words "race" and "atavism" and "white civilization" enter significantly. They are questions that cannot be answered categorically, for the light of the past is filtered through glasses

of prejudice and caution, coloring the most obvious facts and distorting the most impersonal standards.

The 15,000,000 Mexicans include 6,000,000 pure-blooded Indians of fifty tribal strains, and until the exile of the upper classes under Carranza approximately 1,000,000 pure whites of Spanish lineage also called themselves Mexicans; between the two extremes are 8,000,000 mestizos (literally *mixed bloods*) to whose creation the two primary races have for four centuries contributed contrasting elements. It is the resultant hybrid whose numbers make him the typical Mexican of to-day.

The body of the Indian, small, firm, and sturdy, has been softened by the narrow-hipped litheness of the Spaniard to a combination, in this mestizo Mexican, surprisingly lacking in Indian endurance and Spanish virility. The glistening copper skin of the Indian has been paled by the Spaniard's olive glow to varying shades of chocolate brown. The long skull and oval face of the white have, however, affected the rounded contour of the Indian type but little, so that the mestizo is a "round-head," his cheek bones are high, though less prominent than in the aborigines, while his nostrils are wide and lips rather thick. The eyes, uniformly dark, tend to the Indian form, with a greater curve in the lower lid than is normal in the European, and the upper lid much straighter. The hair is black and straight, and coarse and bristly almost in direct proportion to the preponderance of Indian blood. There is relatively little body hair, and the

beard is thin and sparse, also an almost infallible index of the proportion of Indian strain.

Intellectually and psychologically, the Mexican mestizo is more of a hybrid than he is physically. His body type has varied characteristics, although perhaps tending disproportionately to the Indian, but in his brain there seethes the continual conflict of intellectual and psychological predispositions which go back to cultures which in the history of humanity are thousands of years apart. In his mind the blind, unchanging grasp of tradition and superstition which mark the Indian combine with the brilliant logic of the Spaniard to create a person, unstable and at the same time inexorable, bound by racial prejudices which he does not understand and yet which he justifies with an Occidental logic that confuses both himself and the observer. Brave and often devoted, cruel and blindly selfish, proud and childishly sensitive; admiring material and spiritual achievement extravagantly, yet almost incapable alone of the concentration and sacrifice which create these achievements; sentimental and poetical, yet almost untouched by great passions and desires; the Mexican is the victim of his mixed racial and cultural heritage, the plaything of primal forces which tend ever to neutralize one another into a personality often unworthy alike of his rich Spanish intensity and of his Indian simplicity. Though he conceives his revolutions, his social reforms, and his material progress in high-sounding terms of altruism, the forces with which he has torn his country to tatters and even those with which,

from time to time, he has bound up her wounds, have been selfish ambitions and narrow personal desires which partook neither of the white man's militant altruism nor of the red man's love of glory.

Whoever reads Mexican history with an understanding mind must realize that since Cortez came in 1521 to this day Mexico has known but two periods of progress, material or spiritual—one the long, slow evolution under Spanish tutelage, and one that golden age when the mestizo dictator, Diaz, emerging from sixty years of personality-ridden revolutions, called back from exile to the task of service the white aristocrats who alone remained as Mexicans from that picturesque horde of priests and teachers, soldiers and traders, who brought the paternal civilization of the white man to the building of New Spain. The mestizo may indeed have evolved the idea of a nation, but the Diaz régime, as its finest flowering, harnessed the forces that yet remained of white understanding and sacrifice to the making of that nation. What we have seen for the past ten years may be called the disintegration of the mestizo idea of nationalism into its component parts. What the Mexicans call "personalism" in politics is but the remnant in the mixed stock of the self-assured superiority of the white, and the antiforeign laws and the bloody outrages upon the whites are but the Indian fear and hatred of white domination.

One of the basic facts which must be recognized and accepted before one can go on to a true understanding of the people of Mexico is that what is

going on in Mexico to-day and what has been going on there through all of her revolutions since 1810 is basically the uprising of the dark races against the white, a movement too mighty in its scope and too patent a peril to be glossed over by anyone who would speak truthfully of conditions in Mexico to-day. Indeed, one of the ablest of Mexican publicists has himself written that "at the bottom of all the troubles of Mexico . . . is the prehistoric Indian civilization trying to destroy the European civilization; which to-day it has very nearly accomplished." [1]

The Spaniards brought to Mexico ideals and ambitions far different from those which the English colonists carried to New England. Centuries of warfare with Moslems and Jews had fired the Spaniards to religious zeal, and they imposed upon the Mexicans the double yoke of religion and labor, while the English Puritans and Cavaliers were exterminating their Indians and making little effort to convert them. The Indian stocks which the English and the Spaniards met were themselves very different, and to the Spaniards fell a people long ruled by despotic chieftains, long held in religious bondage to cruel gods, more ready to change masters than to oppose a racial enemy. The conversion of the Indians to the Christian faith, the reaching out of the Spanish arms and the Cross to distant missions which became centers of a sort of European civilization and the final

[1] T. Esquivel Obregon, in *Hispanic American Historical Review;* May, 1919, p. 170.

welding of a strangely conglomerate population into a colony which finally became the Mexican nation, is one of the great romances of history. Far flung over an area many times that conquered by the English whites in America before their revolution, the Spanish crown, combining both Church and state, destroyed tribal and theocratic governments, uprooted and virtually wiped out the native culture and civilization, and forced upon the Indian population the standards, the culture, the religion, and the language of Castile.

Three objects inspired the Spanish conquerors, both priests and soldiers: physical domination, racial amalgamation, and intellectual control. The white man's arrogance and science quickly achieved the physical domination of the natives. The racial amalgamation rapidly created what was, after the Mexican revolution of 1823, to come to consider itself a new race—the mestizo—a blending of the peoples, which, in the effort on the part of the mixed blood to set himself up as the inheritor of the white man's superiority, keeps the racial results of the Spanish conquest forever upon the surface of Mexican affairs.

In intellectual control the Spaniards achieved an apparently far-reaching success from the very beginning. Fanatical missionaries destroyed the cultural as well as the religious foundations of Indian civilization, and during the Spanish régime there was but one government and one Church. For those three centuries the Spanish government and the Church sought to wean the Indians rapidly

away from their savagery into the glaring light of the European civilization of their time.

The Indian was a ward of Church and state, and, as much for his care as by the power of wealth, there was raised up an aristocracy of white men and of white women devoted, as far as their understanding went, to the welfare of their people, masters who helped to bring out of the indigenous stock such strength and virtues as their European eyes could find.

During those three hundred years practically all of the civilized Mexico which we know to this day was built. At the expulsion of the Spaniards in 1823 almost the last of the churches had been finished, almost the last of the essential Mexican codes of justice had been hammered out, almost the last plan of Indian education had been conceived and had been partially executed.

Out of this full day of progress Mexico passed into independence and into a night of bloody wars in which the Indians, snatched from the security and lethargy of serfdom, were gathered into armies and thrown against one another in battle lines. Independence but found them new misfortunes; it wrecked their homes and devastated their fields, and for fifty years white against mestizo and mestizo against white wielded Indian armies like clubs in fratricidal war. Most of the accumulated energy and wealth inherited from Spanish times was destroyed, and out of her final exhaustion, guided by Porfirio Diaz, an inspired rebel who became a successful revolutionist and ultimately a great

statesman, Mexico emerged into her years of peace.

Previous to Diaz the mestizo revolutionists had demonstrated throughout their succeeding upheavals that the freedom which they demanded and which they promised to the Indians was in essence a freedom to loot and despoil their country, a freedom to use society for their own ends, features typical of the revolutions of 1810 to 1876, just as they are typical of the revolutions since 1910. Diaz from the beginning displayed a new tolerance and wisdom which quickly reconciled all social forces to his government. He brought back the old creole[1] aristocracy because he recognized Mexico's vital need of the stabilizing influence of the social power which they represented. From these white aristocrats, representing ordered society, as the white aristocrats of Mexico who are now in exile represent all that remains in the world to-day of Mexican social power, Diaz forged the tools of his great régime. These were the tools of the white man's code, the tools which built Mexico's greatness as a colony of Spain, tools whose intelligence and devotion made her greatness under Diaz.

The Mexican problem has, in the words of her own statesmen, time and again been announced as a social question and a social question alone. Diaz has been criticized and anathematized because to the solution he brought only political peace and economic progress, leaving, as his detractors say,

[1]The word "creole" is used in Mexico to-day to designate any Mexican of pure white ancestry.

the great social problem utterly untouched—socially. Yet as one looks on the Mexican situation to-day, realizing that on these myriad social problems Mexican mestizos have brought to bear political solutions borrowed from our Anglo-Saxon constitutions, borrowed from Teutonic Marxian socialism, borrowed even from Russian Bolshevism, one finds oneself swinging back to a simple appreciation of the material bases of human progress, the material bases that gave the Indian in Mexico under the viceroys and under Diaz a place to call home, a tiny corn patch where he could raise his food unmolested and a Church wherein, for all its faults, his soul found surcease.

This was the white man's rule and this is the rule which gave way in Mexico after the viceroys to anarchy and misery and which gave way after the dictatorship to anarchy and misery. Here is the essence of the problem in that at least for such a land as Mexico, where a vast mass of population lives forever on the outer verge of poverty, the beginnings of progress and the beginnings of civilization must be concerned first with the filling of the human stomach and the satisfaction of the human craving for home and religion and happiness. These things the mestizo revolutions of Mexico have never given to anyone save their demagogues.

Yet to-day Mexico is a mestizo, a half-breed, land. The characteristics of Indian and of Spaniard are merged in her population and in her rulers. But as we watch her progress downward through revolution after revolution, and as we shall observe

her life in the pages which make up this book, we find forced upon us the realization that in this welter of conflicting cultures and psychologies the predominating factor to-day is Indian, and that sooner or later, unless the white world again takes up the burden, Mexico must inevitably slip back to the plane of pre-Spanish barbarism.

Mexico stands to-day at our doorstep dressed in the rags of our civilization. In our pride we believed that those rags would clothe her always, and we have lent our prestige to our half brothers, the mestizos, in the belief that they would see that the clothing of our civilization on the Indian would be kept in repair. We must recognize and admit that to-day the half brother is a failure. He has used the whip which we gave him for discipline with the hand of a slave driver; he has stained the sword of authority with the blood of his wards; he has thrown back in our faces the mangled bodies of our martyred missionaries of religion, of commerce, and of science. A hundred years ago his Indian blood raised him against white rule, and to-day his Indian blood has almost conquered his white virtues. He is about to pass under the sway, first mentally and morally, and ultimately physically and culturally, of the Indian. The path behind him is clear and broad; we can look back on it, lined with ruins and with crosses. Ahead through the jungle a new road is to be carved. It may go in many ways, and the choice comes forcibly to us, more forcibly every day, with the realization that we, the white, we alone must choose. The mestizo,

the true Mexican, is helpless, torn and driven by his conflicting heritages, and yet always and hopelessly with the white in him overawed and made despicable by the Indian strain which pushes up and up and up even as his skin darkens under the tropic sun.

II

RACE ORIGINS

FOR four hundred years Mexico has lived in racial isolation. During the three colonial centuries no white men excepting Spaniards were allowed to enter, and through the hundred years of independence (save only for the last decade of the Diaz rule) no other foreigners have attempted permanent residence in the country. When the first revolution broke out in 1810 there were 60,000 foreign born; in 1825, after the expulsion of the Spaniards, there were probably not over 1,000; in 1895 there were 3,713; in 1900, 57,508; in 1910, 115,869; and in 1920 there are not over 5,000 foreigners in all Mexico.

This racial isolation is probably the most important single fact in Mexican history. It gave her the long preponderance of Spanish culture; from it has come the turbulent domination of the mestizos, and that disintegration of the half-breed stock toward Indianism which characterizes Mexico to-day. Toward it we must look for the aristocracy of indigenous white men who alone seem capable of saving Mexico from herself.

From the beginning of Spanish rule in 1521, all

foreigners were excluded from the American colonies, primarily to insure political and religious control, and secondarily to prevent a knowledge of their wealth from reaching the ears of the hardy French and English buccaneers. None but Spanish ships sailed to Vera Cruz, and heavy penalties were exacted of the sea captains who carried foreigners without license from the king. In all colonial history not over half a dozen Englishmen (old residents of Spain) visited Mexico as merchants, and Baron von Humboldt, who traveled five years in Spanish America under royal patronage, met but one German resident and found that the natives could not believe that there were white men who did not speak Spanish.

The age of Diaz was a period of slow opening to the outside world, but marked, as we have seen, by hardly more than ten years of appreciable foreign immigration. Even then the foreign population had little interest in any form of racial amalgamation, while the economic situation, both before Diaz and since, has created an impregnable barrier against the "energizing stream of white immigration from beyond the seas" which has been advocated from time to time by foreigners and by Mexicans themselves.

Thus the barriers of Spanish political and religious isolation and the political and economic walls of the period of independence have combined to the narrowing of the race problem of Mexico to two elements—the Indians and the Spaniards who came during the colonial epoch. Of these the mass is Indian, numbering at least 6,000,000 at the time

of the conquest, while the leaven is the blood of the 300,000 white men who emigrated from Spain during the three centuries of colonial rule. At its close, in 1823, that rule had reduced the pure Indian population to 2,500,000, and had created at the same time nearly 2,000,000 mestizos. The 60,000 *peninsulares*, or Spaniards born in Spain, represented, however, a greater population of foreign-born whites than was attained for a full century afterward, while the number of creoles or pure white descendants of Spanish immigrants was the same as the average which continued down to the fall of Diaz—about 1,000,000. The climate, the early revolutions, and their economic destruction have combined to keep down all white increase, a work which the Carranza revolution carried to the point where not only all foreigners, but the creoles as well, were virtually in exile.

All this is remarkable and significant, but obvious, indeed. The very increase of foreigners from 1895 to 1910, and their almost complete exodus since the latter year, tend to confirm, in figures, the absence of any real infusion of new white bloods. The 1910 census recorded only 120,000 foreign-born residents of the republic, or eight-tenths of 1 per cent, which, excluding the 115,000 who retained nationality in other countries, leaves but 5,000 Mexican citizens born abroad, or three one-hundredths of 1 per cent.[1]

[1]The proportion of foreign born in the United States in 1910 was 14.7 per cent, the great majority of whom were actual or potential citizens.

We trace the race origins of Mexico, therefore, back through only the two clearly defined lines, Indian and Spanish. In the beginning, we must accept the fact that within both contributions there are interesting and sometimes significant variations. There are nearly fifty Indian tribes whose differences have brought interesting material to the hands of anthropologists. The work of the scientists, however, has been largely with language groups, leaving them at a decided disadvantage in Mexico, where, in spite of the many Indian tribes, Spanish is overwhelmingly the national language. In 1910, 13,143,372, or 87 per cent of the population, claimed it as their native tongue, and the census classification of forty-seven Indian language groups, and 250 dialects, at the same time estimated each tribe as at least three times the population that uses the Indian tongue. An increasing number of modern anthropologists hold that language is of secondary importance in racial classifications, and it is for this reason, as well as because of the overwhelming use of Spanish, that it is touched on lightly here. Certainly the use of Spanish to-day bears out Madison Grant's dictum that "the language that a man speaks may be nothing more than evidence that at some time in the past his race has been in contact, either as conqueror or as conquered, with the original possessors of such language."[1] So, while the Indian linguistic families of Mexico are relatively pure, they do not mark the boundaries

[1] Madison Grant, *The Passing of the Great Race*, p. 56.

of the races that speak them, nor do they indicate that the Indians of to-day are different from those whose language was displaced in ages now forgotten. The Indian types that belong to the soil of Mexico have probably been unchanged through the successive conquests of other Indian races, and it seems likely that they will remain, still unchanged, through the passing of the Spaniards and their descendants of white and mixed blood. The disappearance or persistence of their language means little. Spanish will doubtless remain forever the language of Mexico, even should she slip back to recognized barbarism.

For the purposes of our study, it is the whole vast field of Indian history that calls us, rather than the individual tribal contribution. If aught can be gained in such a work as that attempted here, it is because we shall have succeeded in finding and emphasizing the norm rather than the confusion of details. In the justifiable instinct of the ordinary observer for this simplification, many false conceptions of pre-Spanish Mexican history have crept into common thought. We have become accustomed to see in this long period only a series of conquests in which each older race has been driven out and annihilated by newer conquerors, and its history as a succession of great migrations from the distant north, each wiping out whole peoples and setting up new and greater civilizations composed entirely of new races.

Nothing could be farther from the actual truth. In reality there are but four main strains in Indian

Mexico, each with a long history. First are the primitive Indians of the mainland, still almost without culture, such as the Otomis; second the "wild" tribes of northern Mexico, such as the Yaquis, who are related to the Apaches of the United States and who apparently never had contact with the sedentary tribes to the south; the third represented by the wonderful Mayas of Yucatan; and fourth the great Nahua family which included the Aztecs, Toltecs, and Chichimecs, the group whose history covers all the civilized Indian period in the Valley of Mexico.

In a past so remote that even its written language is undecipherable, Yucatan, Tabasco, Chiapas, and Central America were populated by the Maya race, a people of definite culture and with characteristics which have inspired many theories that they crossed the seas from Asia or Africa or had their origins in a mythical Atlantis. The ruins of the Maya cities and the tropical pampas which were their cornfields are scattered from the peninsula of Yucatan to the Isthmus of Panama. Ruled but never conquered by later civilizations, their race strain definitely persisted, so that even to-day the natives of Yucatan have facial characteristics, color, and bodily traits which link them to races, dark, to be sure, but suggesting a yet more ancient, lighter strain from Mediterranean Berbers or mythical Chinese.

The Nahua peoples whom the Spaniards found also come of ancient stock. Our conception of their history is still warped by the tales of the

Spanish soldiers and priests, chronicles written by men who reached their conclusions through the hazes of partially understood languages and of their own religious conventions. Not only did sixteenth-century Christianity destroy the priceless records of the conquered peoples, but it injected into the native traditions correspondences to support the theological dogma that the entire human race was descended from a single pair of beings who lived in a Garden of Eden in Mesopotamia. The Spaniards, among other things, interpreted the Aztec traditions of a northern origin to mean that the tribes which inhabited the Valley of Mexico had come in successive waves from the far northwest, down through California, Arizona, and Chihuahua, one of the chief reasons for this theory doubtless being the greater likelihood that the New World and Asia were united in the north than that there had been a connection through the broad Pacific (which the Spaniards early explored). The Indian legends did indeed tell of migrations from the north, but most of the landmarks of these lordly journeys have been identified with spots within a radius of a few hundred miles of the City of Mexico, or else with the great Nahua center far to the south. Moreover, archæology has never been quite able to reconcile itself to a connection of the Aztecs, who lived in a semi-civilized state, with those untamed savages who peopled what is now the United States and northern Mexico.

About 1000 B.C., Nahua wanderers from a far country, perhaps Florida, apparently did land

at "Panuco" on the Gulf of Mexico, and, traveling slowly southward along the coastal plain, ultimately reached the rich fields of Tabasco and Chiapas. There they built a Nahua civilization which became predominant between 300 B.C. and 200 B.C. That traditional migration and the probability that, nearly 1,000 years later, Nahua tribes traveled from the Tabasco-Chiapas center as far northward as Zacatecas or Durango and from there descended into the Valley of Mexico as Toltecs, Chichimecs, and Aztecs, are the only grounds which scientific research can find for the tradition of a northern origin.

The cradle of all Indian civilization in Mexico seems to have been this same region of Tabasco and Chiapas. Palenque, with its widely scattered outposts of temple and village ruins, indicates a culture of relatively high rank which flourished about 1000 B.C. The Maya monuments in Yucatan are contemporaneous or older, and the apparent link between Mayas and Nahuas is explained by the theory that the Nahuas, after their wanderings from Panuco, and after building their civilization in Chiapas (about 200 B.C.) from there sent colonists into Yucatan (between 100 B.C. and A.D. 100), where, without destroying the more ancient Maya culture, they added their own and intermingled with the native race strains.

Tabasco and Chiapas became, indeed, only a starting point for expeditions, and in the sixth or seventh century of our era Nahua families began the wanderings northward which ultimately brought

them to the Valley of Mexico. On their original journey south from Panuco it seems that the Nahuas followed the eastern mountain slopes and coastland, but when the migrations back northward began a new route was chosen, apparently crossing the Isthmus of Tehuantepec and going up the west coast. These migrations found their way to regions only a few days' journey to the north of Anahuac (as the Valley of Mexico was called in Indian tradition), and from there descended in the successive waves which we know as Toltec, Chichimec, and Aztec. By the time the Spaniards came this single people had stamped the entire culture of the Mexico which Cortez found, and were triumphant from the Gulf coast to the Valley of Mexico and beyond, either under Aztec rule or in the more ancient tribes which were descendants of the families the Nahuas left as they wandered southward from Panuco, between 1000 and 500 B.C.

When the Aztecs first reached the Valley of Mexico they had become, as Bancroft expresses it, "first the pests of Anahuac and later its tyrants." Their history, their culture, and their government, as found and described by the Spaniards, have been the subject of much writing and much controversy. The greatness of their power and the advanced state of their culture are undeniable, and one of the most interesting features is that their state was founded and grew to full flowering during the centuries when Europe was plunged in the dark gloom of the Middle Ages. But their racial contribution, in which we are most interested here,

was not of a character to reassure us in contemplating the Indian mass of Mexico then or to-day.

The records and traditions of all the Nahua peoples, both in the Tabasco-Chiapas country and in the Mexican plateau, all indicate that their domination was political and cultural rather than racial. The tales of the events of that time deal with demigods, with priests, and with kings, but we find ourselves continually realizing that the common peoples of the Toltecs, the Chichimecs, and the Aztecs were probably indigenous tribes into which the Nahua blood was injected, just as the Spanish blood was injected centuries later. Each of the Nahua peoples, in its invasion of the Valley of Mexico, came apparently in a small group, and seldom as conquerors. Only the Chichimecs, who, according to tradition, came from the north (probably Zacatecas) to the number of more than 3,000,000 men and women, besides children (doubtless an absurd exaggeration), seem to have brought an entire tribal organization with them. The Toltecs, who preceded them, had come as a small expedition, it being recorded that the entire party lived in a single great house which they built at Tula. The Aztecs were so insignificant on their arrival (about A.D. 1325) that they were forced to live in a swamp, so that they came to be called, probably at the instance of some prehistoric jester, crane people, or waders.

When the Toltecs came to the Valley of Mexico, probably about A.D. 500, they found already built the great pyramids of the Sun and Moon at Teoti-

huacan near where Mexico City now stands, the work of a yet older, though perhaps also Nahua, people. The Toltecs adopted the religion of the priests at that sacred spot, and thus in another way insured a race amalgamation. Kings and queens were obtained from neighboring tribes, and one of the early diplomatic crises of Mexico was averted when the Toltec nations invited a Chichimec king to rule over them, about A.D. 850.

Race purity, therefore, was never an ideal in Mexico, and it seems inevitable for us to believe that in all these mixtures there was a tendency, which remains to this day, to reach back in race type to the original or autocthonous peoples who had lived in the territory from the earliest period. The physical similarities in color and physique of the so-called Aztec Indians of the Valley of Mexico to the Otomis seems proof of this. The Otomi is probably one of the oldest as well as the least advanced of all the Mexican Indians, and tradition has it that certain groups of Otomis came down from the hills in Toltec times and adopted Nahua culture. This may well indicate that these primitive peoples were the chief basis of the peasant class of the Toltec and succeeding conquerors, for the Aztec Indian whom one now finds in Mexico gives as little indication of the great civilization of which he is theoretically the survival as does the modern Greek of the civilization of Pericles.

To Mexican racial history, the Indian's chief contribution has been one of vital force. Maya, Nahua, and Spanish cultures have swept over him,

used him as a stepping stone to a power they have held for varying periods, yet each has in the end fallen back, to be lost in tradition or in history, while the mass of the Indian, Yaqui and Otomi, Maya and Zapotec, and all gradations between, has gone on. His stolidity, his fatalism, his great physical endurance and resistance to the Mexican climate, are characteristics which undoubtedly belonged to him in the ages before the Spaniards came as truly as they mark him to-day. Reproducing with astonishing rapidity, he survived succeeding wars and ages of slavery, breeding out conquerors of his own race through thousands of his brief generations, while in Spanish and republican times he has been slowly recovering from the greatest of his enslavements.

In the early years of the conquest, the Indians died off rapidly. There were great epidemics, there was slavery, there was a colossal misunderstanding of the Indians and their needs by the Spanish officials, and the upsetting of the customs of thousands of years worked sad havoc. The entire native culture was destroyed, their aristocracy literally wiped out, their very preponderance in numbers almost given over to the half-Spanish mestizos.

After the first two hundred years of colonial rule, however, thanks to the Spanish crown and the Church, the Indians began rapidly recovering their numbers and vital force, a recovery which has continued with little interruption ever since. By its very nature, the white race is more of a savior of

the lower native types than of itself, and it may well be that it is because he has been nurtured in the bosom of white civilization that the Indian has gained strength and learned power such as he never knew before, till he is to-day surging up as a menace to that very civilization.

The tendency of the Mexican government system has been, since the time of the viceroys, consistently to eliminate any definite race consciousness in the Indian. Almost from the beginning his natural feeling that he was the original Mexican has been encouraged by his rulers, but mingled with that encouragement has been an emphasis on the difference, and on the inferiority of the native to the white from beyond the seas.

At times throughout Mexican history, hatred of the white man for this self-assumed superiority as much as for his oppressions, has sprung into flame. Such a period is that in which Mexico is living to-day. The antiforeignism expressed in the harangues of the leaders and in the Constitution of 1917 is basically Indian and basically antiwhite. The Zapata phase of the revolutions of the last ten years was frankly and completely Indian, Zapata's object being, as he stated, to drive out the whites and mestizos and possess the rich state of Morelos for the Indians who were its indigenous inhabitants.

This is no new phase of the Mexican problem, for history records that the revolution of 1830 had for its ideal the extermination of the whites, the expelling of the mestizos, and the setting up of a

semitheocratic empire modeled on that of Montezuma. In 1872 one of the decisive battles of Mexican history was fought against the Indian chief Lozada and 18,000 men to save the city of Guadalajara and the whites from extermination. From time to time Indian leaders, essentially Indian in attitude as well as race, have arisen like Lozada and Zapata, and it is probable that one of the factors which has so far saved Mexico from Indian domination was the destruction of the Indian aristocracy and natural Indian leadership. What must we say, however, of the mestizo leadership which is today giving those Indian hordes voice and consideration and which seems to be tending toward an increasing strength and race consciousness of the Indian strain both in the Indians and in the mestizos who now possess the land?

The white race (and we have seen that this is virtually all Spanish) has given to Mexico its language and its predominant culture. Racially, its chief contribution has been its part in the formation of the half-caste mestizo, and in the maintenance of that remnant of white aristocracy which, from time to time, has saved Mexico from utter self-destruction.

The white ethnic contribution came primarily from the conquerors, a group of three hundred adventurers recruited in Cuba, but all pure-blooded Spaniards. The records indicate that they came largely from northern Spain and that many of them were light-skinned and blue-eyed, as the Aztecs welcomed them at first as the returning fair gods

whom legend had promised them. There is no doubt that Cortez's doughty soldiers mixed freely with the native women and early began the infusion of white blood. Their numbers were small, however, and only figuratively can we trace to them the introduction of the Spanish strain. They were followed by adventurers of many types, and throughout the sixteenth century came thousands of young men of poor families as well as younger sons of aristocrats, to seek their fortunes. There came also the governing class and the soldiers. Many of these early adventurers, and, in fact, of the immigrants during the earlier colonial period, came from northern Spain, the Basques and Asturians being most numerous.[1] They did not come to settle or to develop an unoccupied land, but to be supported by the labor of the Indians, and by that labor to wrest from the soil such riches of gold and silver as it might hold. As the country opened up, however, the "men of the sword and cape" gave way to mechanics, tradesmen, and farmers, who prospered and increased as years went on. This natural evolution from adventurers and explorers to substantial developers of the new colony also brought in the criminal class, who went to Mexico and the other Spanish colonies in America under royal pardons or commutations of death sentences to definite terms of residence in America. Exemption from taxation, feudal lordships to founders of colonies, and titles of nobility also served to swell

[1] The source material on this point has not been located. The authority is Ratzel, *Aus Mexico*, Breslau, 1878, p. 317.

the colonial host to the 300,000 recorded emigrants to Mexico.

Racial amalgamation had early become the royal and ecclesiastical solution of the problem of domination. Beginning with the conquerors and extending on through the entire period of Spanish rule, race crossings went on with increasing momentum. What had in the first place been merely a miscegenation of soldiers and native women, became, under the rule of king and Church, a settled policy. Under Charles V the legal marriage of Spaniards and Indian women was encouraged, for the early colonists did not take their women with them. In addition to the king's desire to infuse Spanish blood into Mexico, doubtless with the idea of ultimately making the population white, the Church especially encouraged the race-crossing, in order to hasten the true Christianization of the people. Not alone was the marriage of Spanish men and Indian women encouraged, but when later the Spanish women began to go to the colonies, their marriage with Indian aristocrats was sanctioned by the king and urged by the Church. Thus, the Indian strain was brought into the white race, and the amalgamation went on with tremendous impetus, a process so complete and rapid that a descendant of Montezuma finally became a viceroy of Mexico. Indeed, to this day when an Indian family rises in the social scale it almost invariably crosses by marriage with whiter mestizos, and finally with the creoles. For instance, Benito Juarez, the only true Indian president of Mexico, married a woman of the upper

class. Her mother was an Italian, and their descendants married as follows: his son, a Frenchwoman; his five daughters, three Spaniards, a Mexican, and a Cuban; all of Juarez's grandchildren married whites.

The fact that the Spanish immigrants united racially with the natives instead of driving them out and possessing their land as the Anglo-Saxon colonists in the northern part of the continent did, was due to the nature of both Indians and Spaniards. The Indians of Mexico were a sedentary, semi-civilized type, ready and willing to change masters and to continue the labor to which they had been inured for centuries, while the Indians of the north were wild, untamed savages, hopeless as a contributing element to any civilization. The Puritans, moreover, had no desire to spread their faith among the Indians, and the colonists were themselves workers who found a climate similar to that in which they had been born, while the Spaniards in the south were imbued with a spirit of religious conquest, and were neither desirous nor able to perform manual labor in the unsuitable tropical climate of Mexico. The result of the situation of the Indians and the Spaniards in Mexico inevitably produced an aristocracy, and an aristocratic system, just as the methods of colonization of the Puritans produced a pure democracy.

These ideas of aristocracy have persisted in Mexico to this day, and one of the disturbing factors at the present time is that even in the great class of mestizos no true democracy has ever been possible,

although, had it been possible in this class, democracy might well have been the political salvation as well as the political battle cry of Mexico. But the mestizo, inheriting his sense of aristocracy from his white father, despising the Indian and the work which to him was the destiny of the Indian alone, attempted to preserve the idea of aristocracy which was founded on white superiority in race, education, and culture. This was complicated in the caste organization by the fact that in the mingling of the Spaniard and the Indian the first offspring already had a lighter skin and often predominating European features, and in the first or second generation many of the purely physical features of the Indian tended to disappear. The mestizo came to consider himself as one of the privileged classes, although the Europeans and the creoles always looked down upon him, just as he looked down on the pure-blooded Indian.

The usual metaphor in the discussion of the fusion of races and the evolution of a national type is that of the melting pot. There is a melting pot of Mexico, but it reminds one of the caldrons where the mixture slowly divides itself into varying levels in which each element tends rather to agglomerate with its own kind than to the creation of a fused alloy. The racial product of Mexico has always partaken of one of the two cultures, Indian and Spanish. Seldom, even to the eye of the casual observer, and never to him who studies it deeply, does Mexico manifest racially or culturally any type of man or thought distinct from those two

from which the mixture sprang. Those who see in Mexico a land of progress and vast possibilities find the culture and the ideals of Spain dominating a people emerging under the benign sun of modern civilization and progress; those who are less sanguine see the underlying inert yet dominant mass of Indian pulling European culture and blood down into dark abysses. The hope of Mexico has always been the adaptation of the white man's culture to the Indian's needs; the despair of Mexico has always been the crucifixion of the white man's culture upon the cross of Indian barbarism.

For that Indian type seems to have maintained itself always at its lowest level. The ancient race which built the pyramids of Teotihuacan, the Toltec culture which flourished at Tula, the Chichimecs who carried on the torch, and the Aztecs who created a civilization which astonished even the Spaniards, were all lost in the end in a sea of uncultured humanity.

What appalls us to-day as the underlying, depressing, almost hopeless Indian apathy of modern Mexico is the same unruffled sea in which the civilizations of Indian antiquity have, in succession, plunged to annihilation and obscurity. The history of Mexico is the history of rising civilizations and of their ultimate and complete disappearance. These disappearances we persist in attributing to racial disintegrations (due to climate or what not) which weakened the entire people so that they fell an easy victim to the warlike strength of the invaders, which was manifested, we are sure, in

great massacres. Yet the fact remains that from the tenth century of our era, when the Chichimecs came down from the north to overwhelm the Toltecs and found their outlying cities and villages and at last their great capital at Tula deserted and falling into ruins, to the year of grace 1920 when a bloodless revolution overturned the Carranza rule, the warlike attributes of the Mexican people have been expended in banditry, in raids, and in rows between minor leaders, and the great events of Mexican history have been achieved almost without bloodshed and, what is more significant, without any destruction of the masses of the people. In other words, Mexican history seems to have been a record of succeeding dominations, following one another, not because of the strength of new armies, but because of the weakness of the older leaders.

Always has remained that great, dark sea of the unthinking Indian. Upon its shores have been built the civilizations of succeeding cultures. Against civilization's walls have always beaten the slow, disintegrating waters of its apathy, until those walls have crumbled to the sands upon which they were built. The civilizations which have succeeded have been those which hierarchies and dynasties from beyond its borders have erected through long ages. Can we say, then, that this Indian sea, eternal, apparently unchanging, has to-day been transmuted at last by the infusion of a few thousand white men into its turgid waters, or by a civilization of white men built upon its shores?

Europe has taught us many lessons in the past five years, and perhaps the greatest of these lessons is that the white man's civilization is no more perfect and no more eternal than the civilizations which have preceded it down the long corridors of our history. With foundation stones hewn by Assyrians and Greeks, Egyptians and Romans, we built a structure which crumbled under the blows of our own family quarrels, a destruction that laid bare to our eyes the sands, forever shifting, forever urging upward, of a deep, dull race heritage from neolithic barbarians, sands in which we are to-day seeking new foundations for a new world. Can we then dream that our white man's civilization can have marked an alien people, such as the Indians of Mexico, so deeply that it shall not follow the flight into the dim chambers of Indian tradition of civilizations which their own people built upon their own native culture?

Must we not rather seek some other means than racial amalgamation, some more direct and definite system of white domination, founded deeply in white superiority and the white world's vital need of control of Mexico and her resources in the coming struggle for the shores of the Pacific? We pass now to a brief study of the greatest experiment the world has ever known in the fusing of two widely separated races—the making and the unmaking of the mestizo "race" of Mexico. In its story there is much to illuminate us; in its failure there is appalling warning and significant suggestion.

III

THE MELTING POT

EVERY phase of Mexican history and every Mexican problem has its race correspondence. Even so economic a matter as the land question resolves itself in the end into the difference between European and Indian ideas of property. The failure of the internal financial systems seems directly traceable to the difference in race conceptions of what wealth is. The very police power of government is warped and twisted by these same divergences, and the struggle between aristocracy and demagogy harks back directly to the confusing similarities and differences of Spanish hidalgo and Indian cacique. Every revolution has had its race determinants. The struggle between Church and state in the bloody "Wars of Reform" was in essence a conflict of whites and mestizos, and throughout all Mexican history the momentous changes of public mind and of systems of government, and revolutions great and small, can all be traced, through one line or many, back to basic race determinants. Through long history this struggle has gone grimly on. Mexico's wars have passed by other names, her revolutions have voiced

high-sounding battle cries which have deceived even herself, but, underneath, the struggle has been one of race and the cultures and institutions of race.

The preceding chapter set down something of the origins and contributions of the two primary race strains in Mexico, Indian and Spanish. Our way now leads us to the field where those two meet, mingle, and resolve themselves again—the racial realm of the mestizo, the mixed blood, the half breed.

Some illumination at the outset can be gained from a comparison of Mexican official estimates of the percentages of the various strains in the population, with the actual figures which those percentages would represent:

YEAR	PERCENTAGES			APPROXIMATE NUMBERS		
	White	*Mestizo*	*Indian*	*White*	*Mestizo*	*Indian*
1519[1]	..	..	100	.....	.....	6,000,000
1803	17	36	47	1,060,000	2,000,000	2,500,000
1810	18	22	60	1,080,000	1,320,000	3,600,000
1844[2]	40		60	3,000,000		4,500,000
1876	18	46	36	1,721,000	4,370,000	3,420,000
1884	10	55	35	1,050,000	5,775,000	3,675,000
1905	15	50	35	2,100,000	7,000,000	4,900,000
1910	19	43	38	2,850,000	6,450,000	5,700,000

[1] Cortez estimated the Indian population at 30,000,000, a figure which is here arbitrarily reduced. See p. 56. There was no racial census previous to Humboldt in 1803.

[2] The racial estimates of 1844 did not separate whites and mestizos.

The statistics of Mexico are notoriously inaccurate, and although this table is doubtless far

from the actuality, it indicates two things, first a desire, from time to time through Mexican history, to emphasize one or another strain at the expense of the remaining two, and, second, the undoubtedly steady growth in numerical preponderance of the mestizo. A truer conception of the race situation will be obtained if we eliminate most of the table and compare Humboldt's figures of 1803 (undoubtedly far more accurate than any subsequently compiled by the purely Mexican censuses) with what seems by the tests of education and social class, a fair revision of the 1910 figures to a less lordly preponderance of white blood. The significant figures then read:

YEAR	PERCENTAGES			APPROXIMATE NUMBERS		
	White	*Mestizo*	*Indian*	*White*	*Mestizo*	*Indian*
1803...	17	36	47	1,060,000	2,000,000	2,500,000
1910...	8	52	40	1,150,000	8,000,000	6,000,000

These estimates of the racial situation in 1910 are founded on the obvious facts that the whites have for over one hundred years been deprived of the support of continued immigration such as they enjoyed during the Spanish rule, have been reduced by exile and massacre during the early and recent revolutions, and have also steadily lost in numbers under the unfriendly Mexican climate. The arbitrarily reduced figures for whites are brought nearer harmony with the Mexican census, moreover, by the addition of 1,000,000 of mestizos of white culture and light skins, who, though "white,"

nevertheless cannot rightly be included among the pure bloods.[1]

Seeking out the social values possessed by each of the three race elements, we find them officially tabulated as follows:

Importance in Population	Economic Resources	Sociological Importance	Selective Animal Force
Mestizos	Creoles	Mestizos	Natives
Natives	Mestizos	Natives	Mestizos
Creoles	Natives	Creoles	Creoles

This table was published in the *Boletin de Agricultura*, in 1911, at which time the creoles were overwhelming in economic resources, and when, of course, the mestizos were preponderant in numbers. The placing of the mestizos first in "sociological importance" is more significant of the mental attitude of the compilers of the table than of the unvarnished facts. The culture and institutions of Mexico are white—or they are Indian; the mestizo has nothing of his own to contribute, and either emphasizes the white as he did under Porfirio Diaz or rides in a wild orgy of Indianism as he is doing to-day. Moreover, observation (there are no statistics) and comment of many students leads to the conviction that the lighter mestizos are of little importance in industrial production and except as a small bourgeois "middle class" have little separate economic influence. The Indian, either as a pure blood or as a dark mestizo, is the predominating factor in agriculture and industry. The pure-

[1] See page 200.

blooded Indian is the basis of the rural population, and the mestizos, particularly those of the Indian type, are the industrial workers of the cities and mines.

Not only is the pure white unfit for manual labor, but the mixed blood, almost in direct ratio to the predominance of the white strain, is physically weaker and physically less resistant to climatic conditions than his more Indian brother. This seems further demonstrated by the fact that the white man, including the American farmers who in small colonies distributed themselves in various sections of Mexico toward the end of the Diaz régime, has never been a continuous worker in the fields, and practically all foreign colonization schemes have fallen down before the competition of the cheaper peon labor.

Of more significance in the social classifications above, however, is the placing of the Indian as the primary factor in "selective animal force."

For many generations, the Indians increased in numbers very slowly, while the mestizos rapidly became the overwhelming element in the population; but, on the other hand, in numbers and proportion the pure whites have fallen far below the average increase in the total population of Mexico, barely holding their own even in numbers. Moreover, the Indians since 1810 have increased almost as rapidly as the mestizos. With his short generations and his adaptability to the Mexican climate, the Indian contribution to the mestizo is overwhelmingly one of vital force. This official classification

brings us definitely to the question which we must now face, the question of the racial place of the mestizo.

For what is this mestizo? Is he race or mongrel? Is he a half-breed, with all the half-breed's uncertainties, temptations, and confusions, or is he, as the mestizo propagandists insist, the precursor of a new race? There are two phases of the question, first the actual blood mixture and its tendencies, and second the historical background, with its very great significances.

Primarily in the matter of blood mixture is the fact that the mestizo is reproducing from within his own group. Less than half a million, and probably not more than 300,000, white men have contributed to Mexico's race type in the 400 years of her history, and although the first whites crossed freely with the Indians, the number of these primary crossings has been rapidly decreasing, so that the numbers and proportion of what we may call *new* mestizos has become less with each generation. To-day it is safe to estimate that not 1 per cent of the living mestizos is the result of first crossings of whites and Indians. This "new race" has then been perpetuating itself, and demonstrating a remarkable vitality under the conditions of life in Mexico, a vitality greater than that of the white and at least equal to the Indian's. This is taken by the advocates of the new race as proof of the permanence of the mestizo mixture. But the rapid reproduction of the human hybrid may be accepted, and as already pointed out, the vital

force of the mestizo is also directly traceable to the Indian strain.

The reproduction of the mestizos within their own group, however, brings them definitely under the ægis of the laws of inheritance of type tendencies. This would lead us to expect them to show signs of division into the primal race types, and indeed there are signs that the once-blended mestizos are now dividing into light and dark groups. There are as yet very few statistics or records of human race inheritances even in definite families in any portion of the world, and in Mexico there are none. We cannot actually prove, therefore, that the Mendelian law of reversion into primal types is in action among the mestizos, but observation and the statements of the Mexicans themselves certainly indicate that it is at work in the mixed breed of Mexico as relentlessly as in the guinea pig of the laboratory.

It was of record during the Spanish régime that where negroes and Spaniards crossed there was likely to be the reversion to type which was called the *salto atras* (jump back) to the negro—that is, the same phenomenon which appears from time to time in families of almost white octoroons in the United States. The Spaniards noted also that, while the Indian strain persisted only through the second crossing with the pure white, negro traits lasted to the third crossing—that is, to the octoroon—and a Chinese crossing was visible even into the seventh generation. The mestizos take it as proof of a race blending that the sudden reversion or

salto atras to the lower race type was never recorded from the crossings of Indian and Spaniard, but this may well have been due to the difficulties of observation of any but the upper classes, and also to the frequent darkness of the Spanish skin and the absence of blue eyes. There has been practically no recorded observation on this point in the period following the Spanish rule, the period when the increasing proportion of mestizo interbreedings and the lessening number of *new* mestizos would have made the records of great value.

The Spaniard is seldom a true blond, and the blond would almost alone attract common attention in any reversion of the mixed blood to the types of his ancestors. Where whites of north European ancestry have crossed with Indians, there are often surprising and ludicrous reversions to type. In mining camps such as Pachuca and Zacatecas, where Cornish miners were brought over early in the last century to install pumps in ancient workings, one sees again and again Mexicans (now in the third or fourth generation from a white ancestor) who live as the lowest peons, and who have no knowledge of British ancestry, and yet whose skin is fair, whose eyes are blue, and whose hair and beard are light. In the state of Chiapas there is a well-known example in the family of MacGregors. Several brothers of the name came to the country about 1840 and married with mestizos and Indians. In the legitimate line there are today many score of MacGregors, bearing the Scotch surname, and of these the preponderant

type is almost completely Indian, yet in these Indian families (or dark mestizos, as they are called) there occur at intervals tall, blond Scotch types who speak no word of English and live as the mestizos of their community. This isolated example would suggest that the mestizo, in his inbreeding, is following Mendelian law, which, in these later generations, would manifest this exact phenomenon, the breaking up of the mixed-color peoples into their original racial types, with an ever-increasing number of pure types of the darker or lower, and therefore more deeply rooted, native strain.

In many families of upper-class mestizos one often finds a single member with either a far lighter or a far darker skin than his brothers and sisters, and the same phenomenon is also found in families of servants where similar observation is possible. As a rule, however, when we go into the lower classes the overwhelming number of illegitimate births, and the fact that the children of one low-class woman may each have had a different father, not only complicates observation, but it also furnishes a convenient explanation of the appearance of darker and lighter types on the old theory of mixing ráces as one mixes paints.

A fertile field, and a field of vast importance, awaits the ethnologist in the study of the mestizo, for the racial history of Mexico seems to be supported by other experiences of higher race domination *versus* lower race persistence.[1] The new con-

[1] Cf. Madison Grant, *The Passing of the Great Race* (1916), and Lothrop Stoddard, *The Rising Tide of Color* (1920).

ception of anthropology of which Mr. Grant is the sponsor faces resolutely the fact of this racial resistance of a well-acclimated population to any and almost all incursions of foreign blood.

In Mexico the mixture of red and white races was more complete and in greater numbers than in any other of the Spanish colonies, and the apparent reversion in race type and in culture to the Indian would seem to confirm the tendency toward the ultimate leveling of the mixed population to the lower, more deeply rooted indigenous race. When anthropologists finally come to devote themselves to a thorough study of this most interesting and apparently complete mixture of two races in numbers that are overwhelming, we may look not only for important illumination on the subject of Mendelian tendencies in the human race, but also for facts which may well be so significant as to determine the course of future policies toward Mexico, both in education and in politics.

Inevitably, our study of the interaction of the races leads us to a racial interpretation of Mexican history. Recent tendencies, fitting themselves to the events of the past, divide the story of Mexico into three distinct, if overlapping, periods: the era of white domination, the upsurgence of the mestizo, and the rising sea of the Indian. The background is, of course, Indian. The white domination followed, and continued through the colonial régime and into the revolutionary period preceding Diaz, when the mestizo element came in forcefully, but without quite destroying the hold of the white

culture, which flowered again during the Diaz peace. The mestizo advance was only interrupted, however, and its upsurgence finally overthrew the white rule of Diaz, continuing until the fall and death of Carranza, when the Indian again took control, a control increasing with the momentum of primal race tendencies in the lowering type of mestizos who have had charge of the government.

The first of these historical phases, the physical and intellectual domination of the white, began with the conquest in 1521. It extended uninterruptedly until 1823, when the Spaniards were finally expelled, to be followed some years later by most of the creole aristocracy. The period of complete white domination was revived after the second election of Porfirio Diaz to the presidency, in 1884, when he recalled the creoles to aid him in the problems of government. Actual white domination then continued into the middle of the Madero régime in 1912, when the mestizo again assumed command, politically and culturally.

The Spanish conquerors saw, not only political control, but racial domination, and vaguely expected Mexico to become some sort of white man's country with a red population ever lessening with the spread of Christianity and the dilution of the native blood. The Spanish population approximately trebled itself in pure bloods in three centuries; in addition it multiplied itself almost seven times in the mestizo community. The astonishing rapidity of the mixture of the white with the Indian gave a false appearance of white

racial domination, an appearance which lasted continuously until the whites were driven out during the revolutions of the nineteenth century.

The white political and intellectual control of Mexico did not pass immediately with the success of the revolution, for the idea of white superiority was deeply embedded in the Indian and mestizo mind. The conquest was a conquest of white men, which Cortez had accomplished through his control of his Indian allies, and the Spaniards maintained their intellectual hold upon the mass through the colonial period and even after the revolution was actually accomplished. The revolution of 1810 was a rising of the Indians, and 80,000 of the aborigines marched on Mexico City, but it was not until the white creoles took hold upon of the rebellion that it achieved its triumph in 1823. It was then only through the training which the whites gave the mestizos that the latter finally became sufficiently cohesive to take the revolution into their own hands, and, with the revolution, the government and control of the Indian population.

In spite of the exile of the whites and the horrors of the long wars previous to Diaz, the spirit of Mexico did not then eliminate white ideals with any of the definiteness which has marked their elimination since 1912. Porfirio Diaz postponed the final upheaval of the mestizos and saved one generation of his country for a glorious history by recalling the whites to assist him and to mark his administration for the admiration and praise of the world. As we see it now, the rule of Diaz was a harking

back to the fundamental strength of white political science and government, differing from the best phases of Spanish colonial control only in the presence of the mestizo dictator in place of the Spanish viceroy, and the broader, more modern vision which welcomed white foreigners of every nationality.

Mexico under Diaz continued a land with a white cultural background and with race conventions which should tend, as the Spaniards had hoped, and as the Mexicans of that day fondly deluded themselves into believing, to create a Mexican type as true and as constructive as the American of to-day. That dream of the Spaniards that their race might form a white nation in the Western World is to-day but a memory and a dream of the sentimentalist. In the course of the political struggles of the last decade the mestizos have driven out practically all of the white foreigners, and the overwhelming majority of their own white peoples, until to-day there are fewer white men within the confines of the Republic of Mexico than there have been at any time since the first shiploads of Spanish colonists landed at Vera Cruz. Mexico has ceased, for the moment at least, to be a white man's country, and the struggle which is going on to-day, with its intense personalisms and its utter disregard for cultural and international obligations, is developing with each new revolution into more and more of the age-old battle of the dark races against the white.

The second phase of Mexican racial history is

this upsurgence of the mestizo, reaching back, of course, into the Spanish régime, but coming into the open in 1823, achieving its object under Madero, and lasting until the fall of Carranza and his murder by an Indian revolutionary "general" in 1920. At this latter date the untamed forces of Indianism which the mestizos loosed and loosed anew in each of their revolutions, combined at last with the growing realization that the mestizo was not a white man to overthrow the last pretense of mixed white political control in the country.

The political power of the mestizos dates from the revolution when, raised by the creoles out of the degradation of "caste" to positions of power, they, by new uprisings, took matters into their own hands. This political control began the elimination of the whites, who would normally have been driven out in the middle of the last century as they were in other Latin-American countries. Diaz, as we have seen, brought a revival of white government, but under him the mestizos gained new political education and came into a new race consciousness (distinct from the anti-Spanish consciousness of the middle of the last century). From this race consciousness came, under the white rule of 1884 to 1910, the proud assertions of the creation of the "new Latin-American race," which finally resulted in the overthrow of the white aristocratic rule of Diaz.

The revolution of 1910 was the upheaval of mestizo intellectuals who had awakened and harnessed the always slumbering Indian discontent to the

destruction of the white civilization. In the ten years which have followed, the mestizo has shown the Indian that the white man was at least not invincible, but the Indian has also learned through mestizo ineptitudes, mestizo oppressions, and finally through mestizo weaknesses, that the white blood in his half-breed brother lacks even the stability and reliability which characterized the "oppressors" of colonial days or Diaz régime. Slowly it began, but to-day the tide is coming with a rush which we shall feel more forcibly as time goes on—unless the white man again takes control.

This brings us to the third phase of the creation of the Mexican national type, the resurgence of the Indian. It has been in slow process through all Mexican history, for the Indian has been used time and again as the weapon of all the warring factions of Mexican revolutions, and it was inevitable that he should in the end realize his own strength.

President Victoriano Huerta gave voice to the basic tenets of the Indian resurgence in 1914 in these words: "The Mexican situation can never be settled by placing the Indian of the soil in a subordinate position to people of other and more progressive races."[1] The final deathblow to the mestizo domination and perhaps to all white or near-white control in Mexico from within herself, was given by the Carranza constitution of 1917, wherein the fair words of the white man's democracy and the white man's socialism were bent to

[1] Message of *Chargé-d'affaires* Nelson O'Shaughnessy, to United States State Department, February 22, 1914.

the expression of Indian antiforeignism, communism, and license to loot and kill.

In the Spanish conquest of Mexico the Indians who fought beside Cortez were his army and not mere allies, a control of brains and generalship and not a surrender of control by the brain to the brute force of the mass. The revolution of 1810, originally an Indian uprising, was a failure until the creoles took command. Soon, however, the whites had come to be almost the tools of the insurgent mass, and to that mass the scepter of control soon passed. It was the mestizos who grasped it and held it until Diaz came. But in the end Diaz, then Madero, then Huerta, were driven out by Indian armies led by mestizo rebels and bandits.

Carranza followed in the same procession, but with his passing there uprose through the mestizo leadership a stronger tide of Indianism than had yet been manifested upon the surface of Mexican affairs. This tide is rising in two waves. One wave is spiritual, in the conflicting nature of the mestizo, whose white pride and arrogance are all that are left of his European heritage, while the red man's cruelty and unthinking grasp of immediate advantage are becoming more and more the outstanding characteristics of Mexican leaders. The other is the actual physical and political control which the Indian element is exercising, a change which has been going on so rapidly that a world still clinging to the idea of slow adaptations has as yet taken no cognizance of it.

In the preceding chapter we discussed the con-

tribution of the red man and the white to Mexico's racial melting pot. But what of the contribution of the melting-pot, the mestizo? Our first instinct is to say that such a question is unfair, and yet it is not unfair because the mestizo himself demands that that contribution be considered. He states that the idea of nationality in Mexico sprang from the mestizo and from the mestizo alone. He holds that the mestizo has given to Mexico such understanding as she has so far manifested of her peculiar racial and social problems. He insists that the mestizo gave Mexico independence, and that the mestizo's contribution to the solution of political and social problems in Latin-America is definitely as great as the contribution of the mixed races of the United States.

The mestizo has indeed made Mexican history, but he has made it as an expression of his own warring tendencies. The mestizo is the product of Indian and Spaniard, and as such has within his soul the factors of both seeking always a level between the two. So eminent a Mexican authority as Vicente Rivas Palacio has written in his monumental volume of *Mexico a Través de los Siglos:*

> The mestizos had become audacious, intriguing, and turbulent. They saw in the future a division among the Spaniards, and a hope for their rise.

Francisco Bulnes, fascinating, humorous, epigrammatic, yet always sound, writes:

> The mestizo has inherited some of the qualities and faults of the Spaniards of the early days. He is vain and brave, but

he is not superstitious, nor is he deceitful in swearing allegiance to his king, his ladies, his God, as the Spaniard did. The mestizo is polygamous, unfaithful to all the ladies, to his gods and his kings. He is skeptical, disinterested as the Indian, but he has one great virtue, he envies no one. He loves the rights of man without knowing what justice is; he loves his country and has the true sentiment toward a great nation; he is faithful as an Arab when it has to do with a promise to fight, and is as informal as an astrologist when he promises to pay his debts. In matters of money he neither collects, loans, nor pays; he hates usury, soap, the external and internal use of water, combs, economy, and the *gachupines* (his name for the Spaniards)." [1]

His cultural chaos, which is sociological more than educational, has been described by F. Garcia Calderon, a Peruvian diplomat, as "an inferior Latinity, verbal abundance, inflated rhetoric, oratorical exaggeration. . . . The half caste loves grace, verbal elegance, quibbles even, and artistic form. . . . In religion he is skeptical and indifferent, and in politics he disputes in the Byzantine manner. No one could discover in him a trace of his Spanish forefather, stoical and adventurous." [2]

Thus the half-caste is condemned out of the mouths of his own people, and yet he, and the restless, destructive character which distinguishes him, are the product of the racial and historical elements of his country. In the colonial régime he was despised by his Spanish father and in turn looked down upon his Indian mother and his Indian half-

[1] Francisco Bulnes, *El Porvenir de las Naciones Hispano-Americanas*, p. 30.

[2] F. Garcia Calderón, *Latin America, Its Rise and Progress*, pp. 351–352.

brothers. Envious of the luxury of the Spaniards, physically unfit for the labor which he despised, literally a member of a caste of pariahs under the colonial system, he found the only fields of activity which were open to him to be the flattering of the Spaniards of wealth and of power, and the stirring up of the Indians into followings which gave him what may be described as a nuisance value. The earlier wars of the revolution were fought chiefly by mestizo chieftains, first with creole leaders, and later with men of their own class who rose rapidly as opportunity came, and, by flattering and aiding their creole countrymen, attained positions from which they later issued the edicts of abandonment against those same creoles.

Since his rise as a governing power in Mexico, the mestizo has absolutely destroyed all color distinctions, so that in Mexico we have the apotheosis of the ideal expressed in terms of idealism of the early Spanish missionaries, who insisted that the mestizo was as good a Catholic, and therefore as good a Spaniard, as the colonists from the homeland. To-day there is absolutely no color line in Mexico, a fact which has had and continues to have a tremendous force in the social conditions which we are observing. This breaking down of the color line in so complete and absolute a fashion has characterized the Mexican people with a homogeneity which, though the observers are unaware of the reason, has given Mexico a place in the curiosity and observation of the world enjoyed by no other Latin-American country. In this, at least,

the mestizo must be given credit for what has been called the idea of nationalism in Mexico.

The attitude of the mestizo toward the Indian and toward the white has been the determining factor in Mexican history. Toward the white he had been vengeful and jealous, and the destruction of race lines was his body blow in the battle with his fairer-skinned adversary. Toward the Indian he has, as we have seen, assumed the superiority of the white and combined it with the craft of the redskin. This has developed what has been called "caciquism" (the craft of the *cacique*, or petty chieftain, or, in the last analysis, demagogy). Culturally this is in Mexico a reversion to Indian methods, for the Indian social organization was in idea that of feudal barons, and in practice that of petty demagogues, leading through successive greater chiefs to the heads of their empires. This caciquism is the manifestation into which the half-breedism of the past century has been so rapidly evolving since the fall of Diaz, a manifestation complete in the ranks of the lower bandits who furnish the regiments of revolutionary armies and progressing steadily upward to those predatory generals whose record has blackened Mexican history with deeds of Indian horror and destruction, and who to-day are parceling out the country, like robber barons, among themselves.

In ten years, under the mestizo leadership of this type, Mexico has wiped out practically all the gain of the generation of white civilization fathered by Porfirio Diaz. The Indian strain in the mestizo,

as well as the Indian strain in the composition of the population, is inexorably rising to the surface. Fifty years of civil strife previous to Diaz, although it was under mestizo leadership, failed to rock to its foundations the Spanish culture which had been implanted under the colonial régime, yet in a single decade following the Diaz surcease we have seen the slow-built fabric of that revived civilization torn to shreds, the very flesh upon which it hung rotted and wasted away through its own indulgence in its own vices. The observer of Mexican affairs begins in his innocence with a faith in the mestizo and a hope for a race which he vaguely finds like his own, but he ends at last as he must end in the face of all the facts and of the grim Indian skeleton that confronts him, with a realization that here is a problem of uplift and education and not of mere political democracy. He must inevitably find in it a problem in which for yet a little while the white men of Mexico itself must carry on their burden, to the saving of this white man's land for its own people as well as for the white world.

IV

MEXICO'S POPULATION

MEXICO, with her 766,929 square miles of area,[1] one-third that of the United States, and twenty times that of the state of Pennsylvania, had in 1910 a population of 15,150,369, one-sixth that of continental United States, and only twice that of Pennsylvania. The growth of this population and its geographic, civic, and industrial distribution have definite importance and bearing upon the life of the country.

Mexico's fifteen millions have been attained through a growth perhaps slower and more painful than that of any other of the new nations of the world. The earliest official census, that of 1793, near the close of the colonial régime, recorded 5,200,000 people in the country, and it has taken 120 years for that number to treble itself, an astonishingly slow rate of growth for a land of so vast an unoccupied habitable area. The reports of Cortez carried to the king of Spain the information that there were 30,000,000 people in Mexico at the time of the conquest, a figure obviously impossible, and justly discounted to about 6,000,000.

[1] *Anuario Estadistico* (1903).

The methods of the early census takers do not inspire confidence in the reliability of their figures, though Cortez produced checks and counterchecks against them. He asserted, for instance, that there were 620,000 families in the Valley of Mexico at the time of the conquest, with an average of six persons per family, giving the population of the Valley of Mexico at 3,720,000—in an area as rich as any in Mexico, which supported slightly over 700,000 in 1910. But Cortez did not stop there; he went on to assert that there were 655 towns in the general vicinity of the Valley of Mexico, containing 900,000 families or 5,400,000 persons, a total of 9,120,000 residents of Mexico, Texcoco, Toluca, and Puebla. Against this he checks the confirmatory record of the Church, showing that, between 1524 and 1540, 6,000,000 Indians were baptized in the Valley of Mexico alone. These figures form the basis of the estimate of 30,000,000, and native historians have generally accepted them without revision.

To the support of Cortez they bring other confirmatory "evidence," such as the statement of the Spanish Captain Montando, who recorded that 800 chieftains and 1,000,000 people greeted his party of explorers at Itzintzuntzan when he took possession of what is now the state of Michoacan. They also cite the colonial records that the smallpox epidemic of 1540 killed 1,000,000 Indians (Father Toribio said "half the Indians"), that the war with the Spaniards took 250,000, that the *matlazhuatl* (measles or typhus) epidemic of 1545 took 100,000

(Humboldt says 800,000), and that of 1576, 2,000,000, a total of 3,350,000 deaths among the Indians in thirty-six years. They also bring to bear the Aztec records and system of government, showing that there were in Anahuac thirty princes, each having 100,000 persons under him, or 6,000,000, and that the nobility numbered 120,000, checking the previous total of 9,120,000.[1]

Even if these figures were true in general, the glib acceptance of 30,000,000 as the Indian population at the time of the conquest is hardly justified, for, as priests and explorers later discovered, the population outside the Valley of Mexico in Indian times was exceedingly small. Yet in each of the records which so satisfy the Mexican statistician there is always a glaring point of error; one can hardly imagine that each Aztec Indian was satisfied with one baptism, as baptisms seemed to be one of the things which pleased the white men, nor can we convince ourselves that the records of deaths in the epidemics are even approximately correct. It hardly seems likely that Captain Montando had an opportunity even to see 1,000,000 natives in the rolling hills of Michoacan, nor that there was not at least a doubling of count when the vassals of the thirty princes and the retainers of the 3,000 minor chieftains were listed.

That there were great populations in Mexico previous to the conquest must, however, be admitted, although they were certainly not contem-

[1] General Carlos Pacheco, *Memoria* as Secretary of Fomento, 1877–82, Mexico, 1885.

poraneous; even in the well-cultivated central portion of the country, archæologists are continually making new discoveries of ruins which indicate vast areas populated by forgotten peoples. The cornfields which surround the ruins of Zempoala, the great Indian town near Vera Cruz which greeted Cortez when he landed, are to this day marked for miles by tiny hillocks which were the foundations of temples and of houses; and about Teotihuacan, the pre-Toltec shrine where the two pyramids of the Sun and Moon still stand, are indications of uncounted villages. The awe-inspiring ruins at Palenque and in Yucatan prove beyond any doubt the presence, long before the conquest, of a population which must have numbered hundreds of thousands. Over against this must be ranged the climatic situation of Mexico, and the living and sanitary conditions which in centuries gone by must have had the same depressing effect upon the longevity of the people that it has to-day. Alcohol has been blamed for many of the evils of the Mexican Indians since the Spaniards came, as have the white man's diseases, which have decimated them from time to time, but even then it seems hardly likely that the early Indians who apparently had practically no sanitary laws, and who were in a state of almost continual war, were without those natural checks to the growth of population which are omnipresent in the lives of primitive peoples.

With all this, however, there is little ground for doubt that the Indian population at the time of the conquest was far greater than any numbers that it

attained for many generations after. The Spaniards did not set about the extermination of the red men as did other colonists of the Western World, but the drastic change of conditions, the enervating slavery, oppressions, and abuses, and the conquerors' lack of understanding of native conditions, combined with natural causes to work havoc with the native population. Even accepting the conservative estimate of 6,000,000 Indian inhabitants at the time of the conquest, we are faced with the fact that the first genuine census in Mexico, that of 1793 by the Conde de Revillagigedo, showed but 5,200,000 inhabitants, less than half of them Indians. This was confirmed by the careful figures of Baron von Humboldt,[1] who estimated that in 1808 there were 5,837,100 inhabitants of New Spain.

Taking both Cortez's estimate and our correction, for 1521, and for want of statistics or estimates between, noting the next census as that of 1793, we have the following list of all official records of population in Mexico:

1521.....	30,000,000	(Hernando Cortes)
1521.....	6,000,000	(Estimated)
1793.....	5,200,000	(Conde de Revillagigedo)
1808.....	5,837,100	(Baron von Humboldt)
1810.....	6,122,354	(Navarro y Noriega)
1824.....	6,500,000	(Poinsett)

[1] Humboldt, in discussing Mexico in 1803, did not estimate the population at the time of the conquest. In placing the Indians in 1803 at 2,500,000 he remarked, significantly, "We have difficulty in believing that nearly two millions and a half of aborigines could survive such lengthened calamities" (as were incident to early colonial rule). Alexander von Humboldt, *Political Essay on the Kingdom of New Spain*, vol. i, p. 139.

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1830.....	7,996,000	(Burkardt)
1838.....	7,044,140	(Conde de la Cortina)
1856.....	7,859,564	(Lerdo de Tejada)
1861.....	8,174,000	(Garcia Cubas)
1869.....	8,743,000	(Garcia Cubas)
1871.....	9,176,082	(Garcia Cubas)
1871.....	9,097,056	(Dept. of Government)
1872.....	9,141,661	(Garcia Cubas)
1872.....	8,836,411	(Manuel Payno)
1872.....	8,655,553	(Congress)
1873.....	9,209,765	(J. M. Perez Hernandez)
1874.....	9,343,479	(Garcia Cubas)
1874.....	8,743,614	(Rivera Cambas)
1878.....	9,686,777	(Dept. of Government)
1878.....	9,384,193	(Dept. of Government)
1880.....	10,001,884	(Emiliano Busto)
1886.....	10,791,685	(Von Glamer)
1888.....	11,490,830	(Bureau of Statistics)
1889.....	11,395,712	(Garcia Cubas)
1890.....	11,632,924	(Antonio Peñafiel)
1892.....	11,614,913	(Dept. of Fomento)
1895.....	12,619,949	(Dept. of Fomento)
1900.....	13,604,923	(Dept. of Fomento)
1910.....	15,150,369	(Dept. of Fomento)

Even the censuses under President Diaz were far from accurate, for the system was faulty in that the Federal government never actually handled the census itself, its instructions going from Mexico City to the governors of the states, thence to the chiefs of the districts, and so on down to the heads of villages, and the figures returned by the same way, with many "corrections" en route. The census of 1910 was probably the most reliable in its totals, but even then the carelessness of the officials, and the difficulties of convincing the Indians that the enumeration was not connected with possible new taxation or military service, brought in elements of error which were complicated by the crudeness of the estimates which were made

in an attempt to balance the shortage. No census nor adequate estimate of population increases has been made since the Diaz census of 1910, and although the rate of increase was fairly established at 15 per cent every ten years, it is probably not safe to estimate that Mexico had in 1920 increased her legitimate 2,250,000 since 1910, as the continual revolutions, the increasing emigration, and the undoubtedly great loss of life, owing to the revolutionary living conditions, has cut down the legitimate increase which was recorded under the peaceful régime of Diaz; present conditions might even show a distinct decrease.

There are, however, certain interesting and extremely important comparisons to be found in Mexican census statistics. For instance, in 1800 the populations of the United States and Mexico were practically equal, approximately 5,300,000. In 1910 the population of Mexico was 15,000,000, and that of continental United States 92,000,000. Taking the conservative estimate of 6,000,000 inhabitants of Mexico at the time of the conquest, the record then shows that Mexico had grown from 6,000,000 to 15,000,000 in approximately 400 years, and the United States had grown from practically nothing to 92,000,000 in 300 years. In the last ten years previous to the census of 1910 the United States had gained 21 per cent and Mexico but 15 per cent.

The rates of increase in Mexico's population have been extremely erratic. Eliminating the period of colonial government when the Indian population of

Mexico first decreased and then recovered rapidly, we find that from 1792 to 1895 the annual increase figures out to about 1.1 per cent, or 11 per cent per decade. Making allowances for all the errors of omission and for the bloodiest revolutionary periods, we can place the normal rate of increase over this first hundred years at about 12 per cent per decade. This, however, compares but feebly with the significant increase marked between 1890 and 1910 when the population grew about 30.5 per cent, or over 15 per cent per decade. There is a yet more startling contrast from 1838 to 1878, the forty bloody years preceding the Diaz régime, when the increase in population was only 33 per cent, or 8.25 per cent per decade. These were the figures available to Bancroft,[1] when he stated that "the period of the independence war is generally regarded as stationary, but after this the increase is reckoned at about eight per mille" (8 per cent per decade). In 1803 Humboldt stated that Mexico should double her population every nineteen years "if the order of nature were not inverted from time to time from some extraordinary cause," and estimated, in 1803, that it was actually doubling every thirty-six to forty years.[2] The census of 1910 showed that Mexico, far from realizing this pre-

[1] H. H. Bancroft, *History of Mexico*, San Francisco, 1888, vol. vi, page 600. In a footnote, Bancroft quotes Journadet, who assumed an "average increase of ten per mille, with a possible addition of two per mille under a peaceful government," figures which the longer period and fuller record since 1888 indicate to be closer to the actual conditions.

[2] *Op. cit.* book ii, pp. 108–109.

diction, was increasing at a rate that would double her population every eighty years.

While Diaz's good government undoubtedly improved on previous conditions, it was not able to revolutionize the important population factors of immigration and emigration. We cannot forget that there has been virtually no immigration since the time of the Spaniards, a condition which the Diaz peace, with all its prosperity and with all its influx of foreigners of the non-producing classes, did not truly remedy. On the other hand, there has always been a distinct Mexican emigration.

In his famous political handbook,[1] Francisco I. Madero, later President of Mexico, stated, "Of all America, Mexico is the only country whose natives emigrate." From the very beginning of her history, Mexico has been a center of emigration. The Philippines were settled and developed by Spaniards and mestizos from Mexico, and for 250 years the convoys of galleons bringing the riches of the Orient kept up a communication between Manila and Acapulco on Mexico's west coast. In later years there was a current of emigration to Florida and to Louisiana, chiefly, however, of Mexican creoles. California was originally populated, so far as its white and mestizo peoples went, from Mexico. During the Spanish era, and even into the period of independence, Yucatan and other sections on the Gulf coast were centers for what was practically a slave traffic which carried

[1] Francisco I. Madero, *La Sucesión Presidencial en 1910*, p. 189.

the Indians to Cuba and other islands of the Spanish main.

For the past twenty-five years there has been a steadily growing current of emigration of Mexico's best laboring classes to the United States, constituting not only a population loss, but one of the most serious drains upon the national labor efficiency. In the mass of the immigrant labor of the United States, the influx of Mexicans is a small factor, but to Mexico the loss has been increasingly serious, growing almost to a peril during the revolutions of 1910–15, and increasingly through the depressing years of Carranza's supposed peace. No figures of value have been compiled by Mexico, and those of the United States government naturally show only the immigrants who enter through the regular ports, while probably the majority slip across the Rio Grande without legal formalities.

No complete records of immigration movement along the Mexican border were kept until 1908, so that the only indications we have of Mexican immigration previous to that date are the census reports of Mexican-born residents at ten-year intervals. These go back to 1850 and show a continuous average of about 0.1 per cent of the whole population of the United States. For the past forty years these figures[1] are as follows:

	1880	*1890*	*1900*	*1910*
Mexican-born residents of U. S.	68,399	77,853	103,393	221,915
Percentage of total population.	0.14	0.12	0.14	0.2
Percentage of foreign born of U.S.	1.0	0.8	1.0	1.6

[1] *U. S. Census* for 1910, vol. i, p. 784.

Since 1908, when complete records were begun, the figures of the permanent class of immigrants—that is, those Mexicans who, on crossing the border at ports of entry, declare their intention of remaining in the United States—show variations almost identical with political upheavals and periods of economic stringency in Mexico. These records [1] are as follows, the figures being for fiscal years ending June 30th, the last item being for the last six months of 1919, or one-half the fiscal year:

1908.. 5,682	1913..10,954	1918..17,602
1909..15,591	1914..13,089	1919..28,844
1910..17,760	1915..10,993	six months of 1919..22,857
1911..18,784	1916..17,198	(at rate of 45,000 per year)
1912..22,001	1917..16,438	

Balancing these figures are deductions to be made by reason of the departure for Mexico of permanent emigrants from the United States—that is, those Mexicans who return to Mexico to resume their residence there, though these permanent emigrants may not all have been classified as permanent immigrants on their arrival. The latest figures on this point are as follows: in the year ending June 30, 1918, the number of immigrant Mexicans admitted through ports of entry was 17,602, while in the same year 25,084 returned to Mexico, a net loss in the United States figures of this class of 7,482. (This was a period when Carranza's promises of peace in Mexico were most encouraging.) In the year ending June 30, 1919, however, while the number admitted was 28,844, the departures were

[1] Data furnished by U. S. Bureau of Immigration.

17,793, leaving a net gain of 11,051 to the United States population. These figures are significant enough, but those for the last six months of 1919 are yet more startling. In this period the permanent immigration from Mexico was 22,857, while the permanent emigration was only 4,603, leaving a net gain of 18,254, or at the rate of 36,308 per year, over three times the rate of permanent gain to the United States and loss to Mexico in the year ending June 30, 1919.

These official figures, briefed as they are, barely suggest the actual emigration from Mexico to the United States. For the entire length of the international line there is hardly a stretch of territory ten miles long where a man who knows the border and the patrol systems cannot cross and recross afoot or by boat without interference. Estimates from the border are to the effect that in the first six months of 1920 fully 100,000 Mexicans crossed the border "informally," and during that period, a time of apprehension, of revolution and economic depression in Mexico, the news from border points spoke frequently of the amazing increase in the number of Mexicans arriving in the United States. Estimates in this matter of Mexican emigration, like so much that deals with Mexico, must always be far superior to statistics, and so long ago as 1908, Victor S. Clark,[1] in his important monograph on Mexican Labor in the United States estimated that the annual immigration of Mexican labor was

[1] Victor S. Clark, *Bulletin of the Bureau of Labor*, No. 71, September, 1908, p. 466.

probably 60,000 and "certainly not over 100,000." Doctor Clark's figures can well be taken as authoritative, and if so, we can hardly doubt the conservatism of the estimate[1] of a rate of 100,000 in the first six months of 1920.

This emigration bears upon Mexico's population and social problems tremendously, because these emigrants to the United States represent the highest types in each of their classes. The cause for this movement is, of course, at its base political, because the economic disruption of Mexico finds its own source in the political upheavals. President Madero little knew, when he called attention to the emigration under President Diaz, that the revolution which he inaugurated would more than treble his country's loss after ten years.[2]

The evil of emigration has long been recognized in Mexico, and caustic reports from consular officers, debates in Congress, and papers by government officials have marked its discussion. The Mexican consuls in the United States sent considerable information on the condition of the emigrants during 1919, and there was even agitation for the Mexican government to close the border to emigrant laborers. There was undoubtedly much misery among the emigrants, and many were deceived by contractors and others, a condition recognized by the United States immigration and consular officials,

[1] New York *Times*, June 20, 1920.

[2] The labor conditions in the United States and the opening of fields other than that of unskilled railway labor to the Mexican immigrants of course have had an effect which there is no intention to ignore.

who did much to avoid such difficulties by limitation of passports, etc. However, the influence of the Mexicans, who, after residence in the United States, return to Mexico, is recognized as ultimately good, and a secretary of Fomento under Huerta officially stated that it was of advantage to the Mexican workman to live in the United States; Mexico should let him go, but should offer real inducements, in land, houses, or opportunities, to get the improved workman to return to Mexico.[1]

To balance the continually growing emigration, there is practically no immigration whatever into Mexico. Not only is this true during the present period, but it has been a static condition ever since the independence cut off the influx of white men from the Spanish peninsula. The population of foreigners in Mexico has, during the independence, been made up almost entirely of temporary residents. Beyond this is the additional fact that even these temporary residents were executives and business men, and the increase of laboring population has been practically *nil*. Most of the 60,000 Spaniards in Mexico at the time of the separation from Spain were driven out, and not until after 1900 was this number of 60,000 foreign white men exceeded. The 1895 census reported only 3,713 foreigners in the Republic, but this grew until in 1900 there were 57,508, and in 1910, 115,869. The following are the totals of the most important foreign colonies at these three periods:

[1] *Boletin de la Dir. Gral. de Agricultura*, November, 1913, pp. 1201 ff.

Year	Americans	British	Spaniards	French	Germans	Chinese	Guatemalans
1895...	937	722	881	157	266	74	30
1900...	15,265	2,995	16,258	3,976	2,565	2,834	5,808
1910...	20,507	5,621	29,332	4,340	3,775	13,140	21,329

Of these the Spaniards also furnished the bulk of the permanent foreign increment, and in 1910, of the pitiful total of 658 naturalized citizens of the Republic, 209 were Spaniards. Many Germans have also made Mexico a permanent home, and some of the Chinese have become Mexican citizens, although this is generally conceived as a means toward their possible emigration to the United States as Mexicans instead of Orientals.

Mexico has not lived all these centuries, however, without definite efforts at foreign colonization. The history of these attempts is long, and as discouraging as it is long. The success which the Argentine has had in obtaining and acclimating immigrants from South Europe has always tempted Mexico, and during the time of President Diaz there was a more or less continuous effort to stimulate similar immigration. In 1878 a plan was put on foot which it was fondly estimated would bring about 200,000 colonists to Mexico in the succeeding fifteen years. A total of ninety-seven contracts were made with various corporations and individuals for the installation of immigrant colonies. Practically all of these were Italian, although some were Spanish and a number were American. About 11,000 Italian colonists in all were brought in, but in 1890 only 5,000 remained, a figure which shrank continuously, until under the attentions of the

revolutionists after 1910 all the colonies were abandoned. The Mormons who settled in northern Chihuahua, with their center in the town of Casas Grandes, began coming in 1882, and gave great promise of progress and development of the section in which they settled to the number of over 10,000. In addition there were other American colonies about the city of Tampico, and some on the Isthmus of Tehuantepec. These, however, like the Mormon and Italian colonies of longer standing, were completely wiped out by the outrages and economic disturbances of the Madero-Carranza revolutions.

Spontaneous immigration into Mexico is and probably always will be of the class of men who, with pioneering and executive genius, develop the latent resources of the country, but who are seldom really permanent, seldom become Mexican citizens, and never add to the numbers of the laboring, and thus ultimately producing, class.

Moving on to the distribution of Mexico's population within her own borders, we find, in 1910, that over the entire country the population density is about eighteen persons per square mile, including both rural and urban, or about the same as the state of Washington, contrasting with the average density of the population of the United States, which was 30.9 per square mile. There has been a continual shifting of Mexico's population within her own borders, and in the following table it may be taken that the distribution and density in 1889 was about the normal for the republic after the artificial shifting caused by the revolutions had

settled down under the Diaz peace. The distributions of 1910 indicate the increasing development of the country as the ultimate result of the Diaz peace, and show the tendencies of the population distribution under modern development.[1]

States	Area in Sq. Miles	Population					
		1889		1895		1910	
		Total	Per Sq. Mile	Total	Per Sq. Mile	Total	Per Sq. Mile
Frontier States							
Chihuahua	87,820	225,652	2.6	226,831	3.0	405,707	4.6
Coahuila	62,376	150,622	2.4	235,638	3.7	362,092	5.8
Nuevo Leon	24,324	236,074	9.2	309,607	13.1	365,150	15.0
Sonora	76,922	134,790	1.7	191,281	2.4	265,383	3.5
Gulf States							
Tamaulipas	32,585	161,121	4.9	204,206	6.3	249,641	7.7
Vera Cruz	29,210	621,476	21.3	855,975	29.3	1,132,859	38.8
Tabasco	10,075	104,747	10.4	134,794	13.3	187,574	18.6
Campeche	18,091	93,976	5.2	90,458	5.0	86,661	4.8
Yucatan	35,214	329,621	9.4	297,507	8.4	339,613	9.6
Pacific States							
Sinaloa	33,681	223,684	6.6	256,414	7.6	323,642	9.6
Tepic	11,279	131,019	11.6	144,308	12.8	171,173	15.2
Jalisco	31,855	1,250,000	39.2	1,107,863	34.8	1,208,885	37.9
Colima	2,273	72,591	31.9	55,677	24.5	77,704	34.6
Michoacan	22,081	784,108	35.5	889,795	38.8	991,880	44.9
Guerrero	25,003	353,193	14.1	417,601	16.7	594,278	23.7
Oaxaca	36,392	768,508	21.1	882,529	24.9	1,040,398	28.5
Chiapas	27,230	241,404	8.9	313,578	11.5	438,843	16.1
Lower California	58,345	31,167	0.6	42,287	0.7	52,272	0.9
Central States							
Durango	38,020	255,652	6.7	294,366	7.7	483,175	12.7
Zacatecas	24,764	465,862	18.9	452,720	18.2	477,556	19.3
Aguas Calientes	2,951	140,180	47.5	103,645	35.1	120,511	40.8
San Luis Potosi	25,323	516,486	20.4	570,814	22.5	627,800	24.7
Guanajuato	11,374	1,007,116	88.5	1,047,238	92.1	1,081,651	95.1
Queretaro	3,558	203,250	57.1	227,233	63.9	244,663	68.8
Hidalgo	8,920	506,028	56.7	548,099	61.6	646,551	72.5
Mexico	9,250	798,480	86.3	838,737	90.7	989,510	106.9
Morelos	2,774	141,665	51.1	159,800	57.6	179,594	64.7
Puebla	12,207	833,125	68.2	979,723	80.2	1,101,600	90.2
Tlaxcala	1,595	138,478	86.8	166,803	104.6	184,171	122.3
Federal District	463	475,737	1,027.5	484,608	1,046.7	720,753	1,556.7

[1] Data for 1889 from Matias Romero, *Geographical and Statistical Notes on Mexico*, for 1895 and 1910, calculated from census figures.

In a general way these figures show that about 75 per cent of the population of Mexico live in the central plateau, about 15 per cent in the semi-tropical areas, and the remaining 10 per cent in the hot country. The normal tendency of the population is to gather densely in the sections where the national foods and drink are produced—that is, in the Valley of Mexico, in Michoacan, Jalisco, etc., less densely about Saltillo, San Luis Potosi, and Aguas Calientes, where the national foods, but not *pulque*, are produced, and with less density in less-favored zones, until the lightest population is in the dry northern plateau and in the hot lands.

The rate of population increase in the various sections of Mexico is illuminating, however. Referring to the table, we find that over the twenty-year period, the population growth was approximately 30.5 per cent, but in the frontier states the net gain was 75 per cent, and in the Gulf states 52 per cent, and yet in these two sections as a whole there is neither arable land nor sanitary living conditions, their growth being due to the growth of mining, industry, and industrial agriculture. The Pacific states—largely agricultural, but great producers of labor—fell below the average increase of the nation, with only 28 per cent advance, while the center, comprising the richest states, and the breeding place of Mexico's population for centuries, gained but 25 per cent, 5.5 per cent less than the average growth of the nation as a whole.

The distribution of the rural population generally harmonizes with the population density in the

various states, and the figures for the states may be taken generally as indicative of the rural population, for only 22 per cent of the people of Mexico live in cities and towns of 4,000 people and over. There is this element to be remembered, however, that the Mexicans are essentially and by instinct town dwellers of the most gregarious type. In the cities they always live in closely built houses, and in the country there are few isolated farms and ranches, practically the entire population of the country living in villages, the farm workers going out each day to their fields and returning each night to their homes. The rural population therefore is not sprinkled over the countryside, but gathered into villages or *haciendas*. An *hacienda* is recognized in Mexico as a kind of incorporated town whose population may run well into the thousands, the people almost all living in one great feudal town about the *hacienda* buildings. The result of this situation is that where, for instance, the population is twelve per square mile, little villages or *haciendas* are found every two or three miles along the trail, while where the density falls to two per square mile, a village is found only every ten or fifteen miles, with almost no isolated farms or huts between.

This rural population is determined largely by the availability and accessibility of the arable land, which in its turn depends on rainfall and irrigation, climate,[1] altitude and mountain contour.

In northern Mexico there are fewer than twelve

[1] See also part ii, chap. i. "Climate."

inhabitants per square mile, the rainfall being less than twelve inches per year, which is insufficient to water the crops. In this section, however, there is grazing, and from time immemorial there has been some irrigation, but in the genuine desert portions, where the rainfall is less than ten inches per year, the population falls to less than two persons per square mile. This most sparsely settled section of Mexico has about the same density as the purely rural population of the desert and mountain section of the United States, extending from Idaho and Montana to New Mexico, while the remaining portion of northern Mexico has about the same rural density as Washington and California.

As a general rule an increase in the rainfall produces a corresponding increase in population, the example being the Monterrey section, where the rural population, due to a better rainfall than in adjoining sections, rises to about twenty-five per square mile. In the more densely populated central plateau country of Mexico and on down the slopes toward the Gulf the rainfall ranges from eighteen to forty inches a year and falls with enough regularity to guarantee fair crops. The rural population here rises to over fifty per square mile, which is about the same as the Middle Atlantic states of New York, New Jersey, and Pennsylvania, the most densely populated rural communities of the United States. About Mexico City, Toluca, Guadalajara, Puebla, and Morelia, the rural population—not counting the urban population of these cities—rises to 125 and 150 per square mile. This

is almost as heavy a rural population as surrounds the larger American cities.

Going down into the tropics, the rainfall increases, but soon begins to have a deterrent effect upon population because, owing to the extremely heavy precipitation, the conditions of agriculture are made worse, as the heavy torrents carry away the vegetable mold, making fertilization necessary, or else the continued moisture causes a rank growth of native vegetation which chokes out the cultivated crops. Indeed, the influence of the rainfall on population is greatly modified by altitude, its effect on the density of rural population being made clear by a glance at the zone crossing the country from Vera Cruz to Manzanillo. The well-watered Gulf plains back of Vera Cruz are so near the sea level that their temperature is very high, maintaining a moist, warm jungle which makes the raising of food crops difficult. The rural population here varies from two to twelve persons per square mile. On the slope toward the plateau the temperature lowers and the rainfall, although heavy, is carried off in mountain streams, so that there are fewer swamps and jungles. The rural population increases from twelve to twenty-five about Puebla and Orizaba, until it reaches twenty-five to fifty per square mile on the plateau. This plateau can be taken as extending not only across the Valley of Mexico, but through Jalisco and Michoacan, where the density continues at from fifty to one hundred and twenty-five in the vicinity of the cities. On the west coast there is no coastal plain, but the

mountain slopes and barren sands create a distribution of population almost identical with that of the Gulf coast, from two to twelve per square mile.

This influence of the highlands on the Mexican population is also manifested on the Oaxaca plateau, which, while isolated from the center, has a population of from twenty-five to fifty per square mile. The Chiapas plateau, farther south, has a density of about twenty-five per square mile, in contrast with the jungle country immediately east of it in Chiapas and Tabasco, and with the narrow desert coast lands on the Pacific side, where the density is two to ten per square mile.

The peninsula of Yucatan has some parallels to the situation in other parts of Mexico, but also has certain unique features. The low population density of Tabasco is carried eastward to the state of Campeche, where the ancient industries of dyewood, hardwood timber, and chicle gathering support a population of twelve to twenty-five per square mile. Campeche soon changes along the coast to the desert section of Yucatan, where, however, the henequen industry has created an unusually large rural population. The number of people per square mile in Yucatan varies from twelve to over twenty-five.

These apparently sparse densities of population account, however, for 11,803,820 of rural population (in villages under 4,000 people). The town population (between 4,000 and 10,000) is 1,234,089; the city dwellers (in towns over 10,000) number 2,171,386, the total "urban population" being 3,405,475, making the division, on the line of towns

of 4,000 and over, 22.4 per cent urban and 77.6 per cent rural.

The following table showing the interesting distribution of these rural and urban dwellers by states was compiled from the data of the 1910 census:

State	Number of Towns			Urban Population			Rural Population
	4,000 to 10,000	10,000 to 25,000	Over 25,000	Towns over 10,000	Towns 4,000 to 10,000	Total Urban	Towns under 4,000
Aguas Calientes.	1	..	1	45,198	4,806	49,004	81,507
Coahuila.....	8	1	2	82,751	39,605	122,356	239,736
Lower Calif.....	1	..	..	.....	5,536	5,536	46,636
Colima.....	..	..	1	25,148	.....	25,148	52,556
Chiapas.....	6	3	..	48,718	38,899	87,617	451,226
Fed. District....	6	3	3	574,945	42,955	617,900	102,853
Guanajuato.....	15	8	2	210,829	94,379	305,208	676,443
Guerrero.....	8	..	..	.....	49,095	49,095	545,183
Hidalgo.....	2	1	..	39,009	16,746	55,725	590,796
Mexico.....	19	2	1	62,929	95,234	158,163	831,347
Michoacan.....	13	4	1	89,063	73,870	162,947	828,933
Morelos.....	5	1	..	12,776	27,551	40,327	139,261
Nuevo Leon.....	4	..	1	78,528	23,019	101,547	263,603
Oaxaca.....	13	2	1	62,915	76,043	138,958	901,440
Puebla.....	16	1	1	107,934	97,068	205,002	896,598
Queretaro.....	2	..	1	33,062	11,390	44,452	200,211
Quint. Roo.....	..	..	..	.....	.....	.....	9,109
S. Luis Potosi...	11	1	1	84,498	54,388	138,886	548,914
Sonora.....	3	2	..	26,911	18,909	48,820	216,563
Tabasco.....	..	1	..	12,327	.....	12,327	175,247
Tamaulipas.....	3	2	..	28,631	22,240	50,871	198,770
Jalisco.....	20	3	1	159,104	117,416	266,520	942,335
Tlaxcala.....	5	..	..	.....	27,061	27,661	157,110
Campeche.....	1	1	..	16,775	6,535	23,310	63,351
Chihuahua.....	4	2	1	64,494	25,984	90,478	315,229
Durango.....	4	1	1	47,760	27,838	75,598	407,577
Sinaloa.....	2	2	..	34,846	10,473	45,319	258,323
Tepic.....	3	1	..	16,778	15,122	31,900	139,273
Vera Cruz.....	18	4	2	142,258	112,232	254,490	878,369
Yucatan.....	6	..	1	62,447	28,105	90,552	249,061
Zacatecas.....	8	..	1	25,900	46,442	72,342	405,214
TOTALS.....	207	46	23	2,171,386	1,234,089	3,405,475	11,803,820

The formation of Mexican cities and the consequent distribution of urban population are due to the natural causes affecting rural population, and also to certain artificial factors. Of the latter, the

insecurity of life during the early days and again at the present time have caused the people to gather together for mutual protection, a factor to which the genesis of the village life of the farmers is also partially traceable. The building of the railways, industrial development and mining are the other artificial conditions which have caused the accumulation of population in towns.

As a whole, the general agricultural nature of the Mexican population has kept the number of cities down to far below the usual proportion. Considering the number of people in Mexico as about one-sixth those of the United States, it might be expected that Mexico would have one-sixth as many good-sized cities. In 1910 she had, however, only sixty-nine cities of over 10,000, while the United States had 601, a ratio of one to nine. In the same year the United States had fifty cities of over 100,000, while Mexico had only two, the capital and Guadalajara; the United States had eight of over 500,000, and Mexico had none. The important cities of Mexico also evidence few of the signs of bustle which characterize similar American towns. This is emphasized by a comparison of Mexican and American cities of the same population. For instance, Mexico City, although it ranks in population with Buffalo, Los Angeles, and San Francisco, impresses the visitor as being far smaller and much less progressive. There are not half a dozen fine buildings that are not public edifices, for there is so little co-operative industry and business that the population does not require

the office buildings, lofts, and working places that an American city of similar size finds indispensable.

Guadalajara, the second city in Mexico, parallels in size the city of San Antonio; Puebla is about the size of Yonkers; Monterrey is like Akron, San Luis Potosi is as large as El Paso; Merida has as many people as Savannah; Leon compares with Chattanooga; Vera Cruz with Charleston, South Carolina; Aguas Calientes with Topeka; Morelia with Lincoln, Nebraska. Yet not one of these Mexican cities would impress the American visitor as having even half the size or importance of its American counterpart; in fact, the importance and beauty of Mexican cities depend but little upon their size or upon the amount of business done.

In distribution, the chief cities of Mexico are grouped almost together in the south central plateau part, with Mexico City in the middle of the group. One comparison would take an egg-shaped area whose larger end is at Guadalajara and San Luis Potosi, and whose longer axis extends southeastward from between those cities to Oaxaca. Such a grouping will have Mexico City at practically the center of the egg and will include more than two-thirds of the cities and nearly two-thirds of the population. Most of the other cities of importance are located along arms radiating from the center, out the railways northward to Chihuahua, northeast to Monterrey and Tampico, and southeast to Vera Cruz. The reasons for this centering of the cities and population are altitude, water supply, temperature, and fertility of the soil. In

practically the entire egg-shaped area two or even three crops can be harvested each year, and in most of it there is either rain at the right time or facilities for irrigation. Most of the cities in the north have their reason for being in the mining industry, or, owing to their location, are on the ancient trade routes now covered by the railways.

The cities of Mexico can also be divided into a number of isolated groups, more or less connected in their economic or physical interdependence. These isolated groups stand out clearly on the Mexican map. They indicate an essentially provincial distribution, almost as significant and indeed depending on much the same causes as the distribution of rural population, with the added determinants of the railways and mines. Natural means of communication have, however, had little part in the location of Mexican cities, There are no good natural harbors on the Gulf coast and few on the Pacific, and, owing to difficulties of approach, those that are available were largely neglected in the upbuilding of Mexico. There are also few navigable rivers, and such as there are are surprisingly neglected. Save for Tampico, at the mouth of the Panuco, and San Juan Bautista (Villa Hermosa) on the Grijalva in Tabasco, no important Mexican cities are located on navigable streams, and one is continually surprised to find practically none of the ancient ruins of pre-Hispanic Mexico on the shores of rivers. The Maya ruins are all well inland, approachable only through heavy jungles, and the imposing remains of Palenque are

located, not near the Usumacinta River, one of the most majestic streams of North America, but a good day's ride from the nearest landing place.

Apparently we must look to the new factors of railways and industrial growth to account for general population as well as rural and urban distribution. But these are not necessarily even the chief causes, for throughout Mexican history there have been definite currents of population, and in similar directions to those of the Diaz period. The radiating center has been for centuries the Valley of Mexico in the great central plateau. Here was the metropolis of Aztec and pre-Aztec civilizations, and here was raised the colonial empire of New Spain; here again to-day is the most thickly inhabited portion of the republic. Aztec, Spanish, and Mexican populations have radiated from this center out into the wastes of the north in search of gold, and down into the tropics in search of food. Always the length of penetration of these radiating lines has been proportionate to the length and virility of the empire which sent them forth. The Aztec flood had reached out and receded before the Spaniards. The colonial régime pushed northward to open the mining camps, and west, east, and south to open trading centers and new food supplies, only to scurry back to the cities on the highlands before the revolutionary hordes of Hidalgo and his successors. The ebb and tide of revolutions, empires, and republics have caused a corresponding ebb and tide of population from the central plateau and the safe cities, and back again to these centers in the

face of succeeding uprisings. The Porfirian civilization, however, did give new outposts against the forces of disintegration, so that less and less has the population tended to rush back to the City of Mexico and its immediate environs. Monterrey, Guadalajara, Tampico, and Vera Cruz, once only outposts, have been, through the terrors of the last decade, centers of safety, usually as secure as the capital itself.

This development of the country by the elements within it the Mexicans call "auto-colonization." Under the viceroys it was specifically encouraged. The colonial government planned definite expeditions into sections where Indian reports or rumors indicated that there were rich lands, mines, or mineral outcroppings to be developed. Native-born creole adventurers, mestizos, and their Indian retainers, accompanied the armies and the priests on these expeditions, opening new territory and founding new cities. It was in this way almost alone that the present states of San Luis Potosi, Guanajuato, Zacatecas and Jalisco were originally populated, and this is also true in part of Tamaulipas, Nuevo Leon, Coahuila, Chihuahua, Sonora, Durango, Sinaloa, and Lower California. This process of auto-colonization, so deliberately studied, was interrupted during the revolutionary period from 1823 until the late 'seventies.

Under Diaz this conscious pioneering was resumed, and the modern industrial development harnessed itself to long custom, to the forces which have always determined Mexico's slow advance and

struggled against the depressing factors of climate, revolution, and racial destructiveness. The plans under which the railways of Mexico were built were almost identical with the fan-shaped development of auto-colonization which took place under the viceroys. Northeast, north, west, south, and east again, the railways branched out from Mexico City. Lines were built for the development of new territory in much the same way as the railways of the western United States were built, always looking forward to an ultimate increase in the value of the railway properties as the importance and richness of these new sections developed. The Diaz railway concessions have often been criticized as tending more to feed Mexico and her riches into the United States than to centralize the Mexican nation, but an understanding of the Spanish auto-colonization system, and of Diaz's realization that the development of Mexico inevitably followed those fanlike branches from the central cradle of Mexican civilization, explains simply this national railway plan.

The auto-colonization of Mexico is one of the great pages of her history, including in its panorama such diverse scenes as the founding of the missions of the American Southwest, the opening of virtually all of Mexico's storied bonanza mines, and the building of the railways by American engineers encouraged by Diaz and the Mexicans of the Diaz epoch. It goes back to the beginnings of modern Mexican history, but not least of its importance is the fact that it was by following this

ancient Mexican custom and by developing the outlying districts and bringing the inhabitants into contact with the culture of the center that the Mexican national ideal was crystallized under Diaz.

V

VITALITY

THE three factors from which we can reach an understanding of vitality in a population are birth and death rate, infant mortality, and average longevity. Such Mexican statistics as exist can be set forth briefly, always understanding that all figures from Mexican sources are excessively inaccurate and must be taken as indices and not as final—all that we may be sure of is that they err on the side most favorable to the appearance of modern progress.

Mexico belongs in the lowest of vitality classes, for her birth rate and her death rate are alike enormous. In the decade 1901–10, her registered birth rate, as corrected by the census growth, was 42.5 per 1,000 (the births actually registered were 33.5 per 1,000) and the average death rate over the same period was 32.6 per 1,000, comparing with the rates of the United States (calculated from the net rate of population increase after deducting the foreign born), which were 29.7 births and 14.6 deaths per 1,000 per year from 1901 to 1910. The Mexican birth rate was thus 1.52 times and the death rate 2.3 times those of the United States. The death rate of Mexico City, the worst in any

reports, was, for 1907, 56 per 1,000, although the average for twelve years was placed as low as 47—rates exceeded only by Lucknow, India, (58.5) or Cairo (49.2). Comparison with other centers of population in the same period (1900–13) gives the following rates: London, 14.7 per 1,000; St. Louis, 16.3; Paris, 16.9; New York, 17.3; Baltimore, 19.4; Rio de Janeiro, 22.5; Moscow, 26.1; Johannesburg (with much the same climate as Mexico City), 29.5; Panama, 30.1; Bombay, 37; Vera Cruz, 41.2.

Births in Mexico are not registered with accuracy, a condition due not only to lax enforcement of regulations, but also to the ancient difficulty between the Church and the government, for no effort is made to harmonize the records of the churches and the civil register. Moreover, the large proportion of illegitimate births makes registry touch the delicacy of the family, while the vast number of births without attendance by either doctor or licensed midwife increases the problem. In 1910 the civil registry showed 435,386 births, the Church registry 294,201, while the average calculated over the ten-year period by the census was 614,024.[1]

As to ratio of birth and death rates, we find that Baron von Humboldt, in 1803, estimated from the data available that the proportion of births to deaths between 1752 and 1802 was as 170 to 100, which, if we accept the figures of this great observer, shows this to have been one of the most prolific

[1] Of the births registered civilly in 1910, 251,252 were legitimate and 184,143 illegitimate; 226,107 were boys and 209,279 girls.

periods of Mexican history, when, indeed, the losses of the early colonial period were undoubtedly being made up rapidly.[1]

The rates per thousand between 1901 and 1910 would indicate a ratio of but 127 births to 100 deaths, however, as the normal condition of the population under the peace of Diaz. We must remember that Humboldt had only one census, that of 1793, to work with, and his calculations were based mostly upon parish registers, the increase of the Church's tithes, and the estimates of provincial officials in isolated localities. It seems fair to assume, therefore, that the ratios shown by the Diaz figures are more accurate, and that, as noted above, they err, if at all, on the side most creditable to Mexico, in this case, in showing a greater preponderance of births.

A comparison of Mexico with other countries will illumine this point:

RATES PER THOUSAND INHABITANTS[2]

Country	Births	Marriages	Deaths	Natural Increase	Infantile Mortality
Mexico	42.5	4.4	32.6	9.9	241
United States	29.7	10.5	14.2	15.5	124
Spain	35.59	8.74	26.07	9.52	180
France	21.64	7.55	19.49	2.15	135
Holland	31.80	7.59	16.26	15.54	130
England and Wales	28.50	7.93	16.23	12.27	133
Ireland	22.98	5.18	17.53	5.45	100
Italy	33.29	7.23	22.15	11.14	175
Norway	29.13	6.42	13.91	15.22	75
Russia	49.05	9.25	31.02	18.03	240

[1] It was upon these figures that Humboldt estimated that Mexico was doubling her population every thirty-six to forty years.

[2] Mexican figures for 1910 from the *Boletin de Estadistica;* United States from Bureau of the Census; others from *Almanach de Gotha,*

In infant mortality, Mexico, as shown in this table, surpasses all other civilized communities in the world. Of all the deaths in 1910, a total of 467,965, those of infants under 1 year numbered 143,297, or 30 per cent of the total, while more than half the entire number of deaths (239,970) were of children under 7 years. The corresponding figures for the United States show that the deaths of children under 1 year are 17 per cent, and of children under 5 years 25 per cent, of the total deaths, while we have to count all to the age of 42 to account for half the deaths in the United States. Infantile mortality is calculated on the ratio of deaths under 1 year per 1,000 births. The average of deaths under 1 year of age for 1901–10 in Mexico was 148,177, and the average of births per year (based on the census interval 1901–10 and not on registration) is 614,024, which gives the infantile mortality rate of Mexico at 241, which is nearly twice that of the registration area of the United States, which in 1910 was 124.[1]

This heavy infantile mortality is usually considered the most outstanding feature of Mexican vital statistics, the basis of her immense death rate, and the clearest index of her sanitary and social conditions in general. Significant it is, and appalling it is, but the actuality is yet more so, for the loss of infant life may be discounted because the social cost of child creation and support for a few

[1] All Mexican figures are from the *Boletin de la Dirección General de Estadistica* for the 1910 census, and unless otherwise stated those for the United States and other countries are from the *Mortality Statistics* of the Bureau of the Census, 1911.

months is infinitesimal in Mexico. More appalling, if we accept the Mexican data, is that half of all who are born in Mexico die before they are 7 years old, and three quarters before they are 40, while half of all who are born in the United States live to be 42. It is the loss each year of the thousands who have passed through early infancy and into promising childhood and youth and early maturity that constitutes the greatest loss from the death rates of Mexico, that make, indeed, the investment in childhood a matter of apparently such questionable wisdom—"they die like flies in any case!"

More than this, half of the Mexicans living today are under 20 years of age, while half of the inhabitants of the United States are over 30, the years of greatest production and greatest addition to the growth of civilization. Only one third of the Mexicans are living after 30 and less than one-fifth attain the maturity of 40 years.

The Mexican statistics available make the computation of average longevity inaccurate, but from the death rate it may be taken at about 15 years, which compares with the average life of residents of New York City, about 23 years, and of the United States, about 35 years.

The following table illustrates the difference in the population of Mexico and the United States at various ages, itself an astonishing commentary on birth-rate, infantile mortality, and the populations at the truly productive ages of human life. The Mexican figures are for 1910, those for the United

MEXICAN AND TYPICAL UNITED STATES POPULATIONS BY AGES[1]

Age Interval	Mexicans: Living at Ages Named in 1910 Total, 15,160,369	United States: From U. S. Life Table for Population of 15,445,608
1–10 days	13,263	.....
11–20 days	13,540	.....
21 days–1 month	33,369	.....
0–1 month	60,172	24,180
2–6 months	205,049	116,586
6 mos.–1 yr.	512,417	134,793
Years		
0–1	777,638	275,559
1–2	467,943	261,285
2–3	467,977	256,587
3–4	461,849	254,049
4–5	457,761	252,348
5–10	2,147,633	1,246,191
10–15	1,594,729	1,229,907
15–20	1,569,639	1,212,999
20–25	1,339,252	1,186,263
25–30	1,485,927	1,154,049
30–35	817,105	1,117,359
35–40	1,089,418	1,074,183
40–45	518,771	1,025,242
45–50	689,135	968,451
50–55	284,350	901,521
55–60	461,909	817,065
60–65	167,446	709,428
65–70	172,993	576,090
70–75	59,035	429,686
75–80	69,364	277,935
80–85	17,696	143,799
85–90	15,411	55,032
90–95	4,229	14,436
95–100	3,861	2,322
Over 100	917	222
Unknown	18,317	.....
	15,160,369	15,445,608

[1] The Mexican figures are taken from the *Boletin de la Dir. Gral. de Estadistica, Censo de 1910.* The United States figures for a similar population were obtained by multiplying by three the "Lx" column of the "Life Tables for Both Sexes in the Original Registration States, 1910," which covered a typical population of 5,148,536. *United States Life Tables*, Washington, 1916.

States an adaptation of the 1910 United States Life Tables for a similar population, including both whites (native and foreign born) and negroes.

There are certain elements of error in the Mexican side of this table, due chiefly to the overwhelming tendency to group the figures about conventional divisions, such as "6 months" and the years ending in 0 and 5. This is always the case in censuses of ignorant people, and the tendency of Mexicans to observe their annual saints' days instead of their birthdays adds to this confusion. Only by this theory can we account, for instance, for the figures which would indicate that there are more than twice as many children listed as between 6 and 12 months of age as under 6 months—an obvious absurdity.

These comparisons indicate, however, that the heavy birth rate of Mexico is not entirely wiped out by the mortality of the early years, for the children who complete their first year are almost three times as many as in the corresponding typical American community, and up to 10 years, even, apparently number about twice the American child population. Balancing the Mexican figures roughly, we can take it that after the early mortality of the first seven years (when, despite half the deaths being at these tender ages, the heavy birth rate still keeps the Mexican age groups greater than similar American groups) youth maintains the Mexican lead until about the age of 20, when the number of Mexicans at each age falls with astonishing rapidity. This is borne out by the mortality

statistics by ages, which show that after the years previous to the age of 7, the heaviest death rate in Mexico is between 20 and 30.

The mortality figures available in the Mexican census reports make comparison with the United States census tables, and indeed even with the Mexican population statistics themselves, almost impossible. The following table had to be made by the aid of crude estimates at important points which, combined with the inaccuracy of Mexican statistics in general, greatly reduces its value.

Where estimates were necessary, however, the graph system was used, making them correspond as nearly as possible to the statistics available. In view of the additional fact that these calculations were certainly not anticipated by the Mexican census statisticians, and so were not provided against, they reveal figures which probably have no greater errors than those made intentionally and unintentionally by the Mexicans themselves in the tables of other sorts that are available.

The information conveyed by this table is, with all its possible inaccuracies, thoroughly significant. The fact that the Mexican death rate is overwhelming in every age group indicates a condition of health and living conditions that is appalling, even though it does bear out (and emphasize) all that has been suggested in theory and observation by physicians and students. Compared with the United States our figures show the following ratios: The Mexican infant mortality rate is 1.93 times that of the United States; death rate between 0–5

years, 2.77 times the United States rate; 5–10 years, 3.24 times; 10–15 years, 3.57 times; 15–20 years, 3.36 times; 20–30 years, 2.88 times; 30–45 years, 3.20 times; 45–65 years, about 2.75 times; over 60, about 1.51 times the similar United States death rate. The infantile mortality of Mexico is,

DEATHS STATISTICS AND RATES BY AGES

Age Intervals	Mexicans Dying in Age Group	Corresponding Deaths, Pennsylvania [2]	Mexico Deaths per 1000 [3]	Pennsylvania Deaths per 1000	U. S. Deaths per 1000	Spain Deaths per 1000	England Deaths per 1000
All Ages..	467,965	222,292	32.6	14.2	14.2	26.5	17.2
Years							
0–1....	143,297	48,390	241.0[4]	124.80[4]	124.0[4]	180.0[4]	129.0[4]
0–5....	213,000 [1]	67,576	91.2	37.3	32.9	104.1	53.5
1–7....	93,673	.....	.....	.....	.....	.....	.....
5–10...	23,000 [1]	5,260	10.7	3.3	3.1	8.6	4.1
7–14...	21,550	.....	.....	.....	.....	.....	.....
10–15...	12,000 [1]	3,106	7.5	2.1	2.2	4.3	2.3
15–20...	18,980	5,258	12.1	3.6	3.6	7.1	3.3
20–25...	.....	8,048	.....	5.2	5.2	9.4	4.3
20–30...	40,847	.....	14.4	.....	5.0	.....	.....
25–35...	.....	16,672	.....	6.2	6.4	9.2	5.9
30–45...	48,235	.....	19.9	.....	6.2	.....	.....
35–45...	.....	18,482	.....	8.8	8.9	11.1	9.9
45–60...	50,495	30,824	35.2	.....	.....	.....	.....
Over 60.	49,956	67,330	97.7	.....	.....	.....	.....

[1] Estimated. The Mexican statistics for deaths below age 20 are in groups of 7 years; above 20, in groups of 5, 10, and 15 years. The population by ages, on the other hand, is in groups of 5 throughout.

[2] Double the deaths of Pennsylvania are used, as this state's population (7,665,111 in 1910) is approximately half that of all Mexico. The deaths used are for 1911.

[3] Mexican death rates are calculated from population reports set down in the preceding table.

[4] This is the infantile mortality rate, the ratio of deaths under 1 year to births (not to the population). Spanish mortality rates from *Movimiento de la Poblacion de España*, Madrid, 1906: English from *Annuaire Internationale de Statistique*, The Hague, 1917.

apparently, less in proportion than Mexico's losses in the higher age groups, a condition less significant in its relation to infantile mortality itself (the rate is vast enough in any case) than in its indication of the health conditions in youth and maturity, as was pointed out above. The most healthful age in Mexico appears to be, as in other countries, between 10 and 15 years, but this group has, by Mexican data, the largest multiple of the United States rate in the entire scale; in other words, more Mexican children, in proportion to normal, die at their healthiest age than die in the perilous days of early infancy.

The figures are an index, above all else, of a state of almost continuous ill health on the part of a large majority of the Mexican people. Perhaps the truest indication that this is the case is this disproportionate number of deaths at the most active age (10–15 years), but there is also the evidence, at first confusing, of the endurance of Mexicans, and particularly of Indians, under the most enervating living conditions, poor food, alcohol, sexual overindulgence and hard labor apparently having but little effect on thousands of the population. The vigor of many Mexicans, in the face of the conditions under which they live, has long been remarked. The famous runners of Aztec days, who in relays carried fish caught in the late afternoon at Vera Cruz over 300 miles and up 7,500 feet into the mountains, to Montezuma's noontime breakfast table in Mexico City, seem like creatures of legend. Yet to-day such runners still cover long routes with mail

and with heavy loads as well, in interior Mexico, and one need not leave the cities to see a single *cargador* carrying a 650-pound piano on his back. In the mines Indians carry loads of 200 to 300 pounds up ladders of 2,000 rungs, and pack great loads over the trails at an endless, unvarying dog-trot hour after hour. The Mexican soldier—and the *soldadera*, or woman commissariat who marches with him—can cover fifty miles a day, if necessary, and the average day's march of Mexican infantry is said to be twenty-four miles, a good day's journey for cavalry.

Indications of great vigor as these are, their very presence forces us, even without the death rates, to a realization that there must be tremendous factors of ill health working on the sections of the population which do not demonstrate such vigor. If we accept the estimate that to an ordinary life there are 6,000 days of slight illness and 300 days of severe illness[1] and realize that in Mexico these days of illness are crowded into fifteen years, instead of the thirty-five years of the average American's life, something of the prevalence of sickness in Mexico becomes evident. To be sure, only about a quarter of the deaths in Mexico are listed as "classified by doctor," which indicates that the rest are without medical attendance and therefore that disease in Mexico probably is fatal after fewer days of sickness than elsewhere. But even giving a liberal discount on this account, we may safely

[1] Cf. Ellsworth Huntington, "The Relation of Health to Racial Capacity—The Example of Mexico," *Geographical Review*, 1920.

assume that there is at least 50 per cent more sickness in Mexico than in other countries. In other words, there are at least half as many days again in which a Mexican has attacks of indigestion, colds, or fevers, than the American or Englishman. That this is literally true, anyone who has lived long in Mexico and dealt much with Mexicans will agree.

Thus ill health becomes one of the great elements working on the Mexican vitality, whether we regard the hard, abusive work, alcohol, bad food, etc., as contributants to this ill health or additional depressants. The fact must be recognized that all of these are destined to remain until relieved by improved social and educational conditions, conditions which, although now truly affected by the resulting apathy, in the long run must be considered as affecting rather than affected by the elements which make for national vigor.

In studying the causes for Mexico's high birth rate, we trace them quickly back to race and climate. The customs which cause early marriages and which eliminate practically all birth control, as well as the fecundity of the women, are perhaps all, in the last analysis, racial and climatic. The Indian is a breeder probably second only to the African negro, and in the mixture of white and red which make up the bulk of Mexico's population this fecundity has apparently not been lost. Mexican families are almost invariably large, and save for the heavy death rate the country would have been populated and overflowed by the early Indians long before the Spaniards came. With the fe-

cundity still persisting, as it apparently does, only the fact that the Spanish civilization did almost nothing to reduce the Indian's natural enemies, disease, war, and famine, has kept the Indian population within bounds. Such improved sanitation as there has been in Mexico has acted upon the mestizo almost alone, and has touched the Indian but little; so that the growth of the mestizo population stands for all the improvement in Mexican living conditions that there has been from Spanish times to those of Diaz.

Although the fecundity of the Indian seems to persist into the mixed breed, there is a noticeable falling off in the size of the families as we ascend the social scale. The records of births among the Indians and peons, however, show a continuation of the immense birth rate. Prof. Frederick Starr [1] records the figures which he gathered from the subjects of his ethnological measurements. Twenty-one Tarascan women had had 152 children, of whom 101 had died, the largest family in the group being 13. Nineteen Tlaxcalan mothers had borne 116 children, of whom half had died, the largest family being 18. Twenty-four Aztec mothers had had 140 children, of whom 60 survived. Twenty-two Mixtec women had had 122 children, of whom 77 were still living. Only one of the group was barren. The record continues through many pages of his book, families of 18 and 20 being common, but almost invariably from half to three quarters

[1] *Physical Characteristics of the Indians of Southern Mexico*, p. 18 *et seq.*

died in infancy. On the father's side there are often startling figures, a Protestant missionary reporting a father of 31 children, 15 by one wife and 16 by another, as being not unusual.

One of the chief contributions to the numbers in Mexican families is the custom of early marriage, as about one half of the Mexican women marry or bear their first child at the age of sixteen. The marriage statistics for 1910 show that out of 58,000 marriages 35,000 of the women were under twenty, and 18,000 between twenty and thirty, while, interestingly enough, about 15,000 of the men were under twenty, and 32,000 between twenty and thirty.

In observing the heavy death rate of Mexico we find the great infantile mortality apparently due to a number of interrelated causes, the first of which is the birth rate, which, by its very preponderance, lessens the care which is given the infants in their tender years and complicates the problem of support, so that the entire family is undernourished, with resultant heavy deaths among the younger members. Early marriages, the heavy strain upon the women of continuous motherhood, and sexual overindulgence all have a bearing on the low vitality of the resultant children.

Custom takes its toll in yet other ways, such as intemperance in food and alcohol and in methods of infant feeding, children being taken from the mother's breast to be fed with *tortillas*, bananas, and hot peppers. Superstition and ignorance combine to prescribe loathsome and inefficient cures for tem-

porary ailments, cause the abuse of patent medicines and nostrums, and continuous violation of all the laws of hygiene. Crowded tenements, lack of any fresh air at night, uncleanliness, and all of the unhappy phases of the living conditions of the low-class Mexican have their part in both infantile mortality and the general high death rates. The climate makes the natives subject to bronchial and pulmonary diseases, furnishes a kindly breeding zone for vermin, animal and insect, with resultant typhus and malaria, while smallpox and digestive diseases are encouraged by both climate and uncleanliness. The climate, moreover, is deleterious in its effect on the food crops, uncertain rains, noxious weeds, and a none too fertile soil combining again and again to devastate the land with famine.

War has been no less a factor in its effect on the death rate in Mexico than elsewhere. The non-combatant element of the population has always suffered from war, and such inaccurate figures as we have of the period previous to the rule of Diaz, and since, suggest that the toll which has been collected time and again by Mexico's interracial struggles probably transcends anything else in her history. Just how great this toll was we shall probably never know, as statistics were not taken during the troublous times in the middle of the last century, and the Carranza government studiously concealed all facts regarding military losses, epidemics, and deaths by famine within Mexico during the decade just closed.

The lack of scientific hygiene, both municipal and

personal, in Mexico has had effects on the death rate which can only be remarked—figures are absolutely unavailable. The Spanish records reported tremendous plagues, the most important of which were those of smallpox, typhus, and measles. When smallpox brought by a negro slave first appeared in Mexico almost immediately after the conquest, the Spanish historians glibly record that "half of the Indian population succumbed." Later epidemics, like that of 1544, took 800,000; that of 1576, 2,000,000 in the central plateau alone; and so on down the years, with decreasing toll, due perhaps as much to the increasing accuracy of statistics as to the lessening of the plague, for we can give but little credence to the very crude estimates of these early epidemics.

Typhus, which, if identical with the traditional Indian plague, *matlalzahuatl*, wiped out millions of Indians at various times before the conquest, has appeared from time to time throughout history since. The so-called "filth diseases" are generally considered endemic in Mexico, but the statistics gathered under Diaz indicate that, although they often appeared, the ravages were comparatively slight, although the epidemic of typhus which raged in Mexico City in 1914, under Carranza, was reported by newspaper correspondents to have carried off well on to 50,000 people.

Probably the most serious phases of the problem of disease in Mexico are the carelessness and ignorance in treatment and the lack of sanitation and pure water supply. The conception of disease

as a visitation from Heaven, and that there is nothing to do for it but to manifest patience and resignation, is deep-rooted in the Mexican philosophy, extending from the lower classes to the highest ranks of society. The directions of doctors are ignored, medicines are not taken, ventilation, sunlight, and baths are varied according to tradition and not to the instructions of the physician even when a physician is called—which is astonishingly seldom. Of the 467,965 deaths in Mexico in 1910, 139,008 were listed as "classified by doctor" and 328,957 as "unclassified," apparently indicating the lack of medical attendance in more than three quarters of the deaths. A sick Mexican is kept in utter darkness and, what is worse, almost without air, he is not bathed, and is stuffed with food; only in the treatment of smallpox, where the light causes the disfigurement of scars, and where baths are notoriously dangerous, are sunlight and water used freely.

Quarantining is almost impossible, owing to the fatalism with which the lower classes regard disease, leaving weather as probably the chief saving factor in the history of Mexican epidemics. The changes between the hot, dry season and the cool, wet season are so great and so sudden that the typical diseases of each quickly succumb, so that typhus will rage in the Mexican capital almost unchecked until the rainy season suddenly and completely stops its ravages.

The sanitary conditions of Mexico towns have never been adequate, and what improvement has

been made has been more than counterbalanced by the crowding of the lower classes into unsanitary dwelling places. Moreover, such municipal sanitation as exists is but recent, and even in Mexico City the achievement of the notable drainage system which the capital now possesses was at great cost and after literal centuries of labor.[1]

Impure and unclean food is almost the rule in Mexico. Such inspection as there is is made by officials without education and without any real conviction of the value or importance of the work which they do. The markets reek with flies, and adulterated and partially decayed food is sold with impunity. The almost complete lack of refrigeration either in transportation or in storage has a salutary effect upon prices of foods, but, unfortunately, eliminates this factor in the preservation of the soundness of the products offered. The food animals are raised under the most disgusting conditions, the Mexican razor-back hog, which furnishes the chief pork supply, competing with the buzzard for the food which he gets. Trichina is almost invariably present in Mexico pork, and he who dares to eat underdone beef in Mexico runs imminent danger of tapeworm.

The climate of Mexico is a most significant factor in the vigor of the people. The warm, humid air of the hot country has much the same effect on the resident as a continuous warm bath—that is, it is debilitating and sedative. In the temperate and cold regions the people are more active, and espe-

[1] See part ii, chapter ix, Cleanliness and Sanitation.

cially so in the northern sections where the climate more nearly approximates that of southern United States, but there seems no doubt that on the plateau the rarefied air, with its accompanying absence of oxygen, and the strain of the long, dry period upon the nervous system, have a definite effect upon the inhabitants, tending to nervousness in the creoles and in foreign whites, and probably resulting in the early death of the nervous types of the lower classes, leaving the lethargic alone as the typical Mexican of the plateau as well as of the hot country.

It is noticeable that when the natives of one section are transferred to another they often succumb by debility or even by early death to the local conditions; the newcomer from the high lands is very likely to break out into sores and to find himself unable to do a full stint of physical work in the hot country, while, on the other hand, the hot-country Indian or mestizo transferred to higher altitudes often falls a victim to the ravages of alcoholism and tuberculosis.

It is generally conceded that as a nation the Mexicans are undernourished. This is due to several causes; first, poverty; second, the apathy which keeps the provider for the family from working more than is necessary for his own personal comfort, with the resultant undernourishment of his large family; and third, the nature of the food consumed.[1] The overindulgence in stimulants ranges from the excessive use of hot peppers for seasoning to a craving for noxious drugs. The ex-

[1] See part ii, chap. vii, Mexican Food.

cessive use of coffee, the drinking of *pulque*, which is not only an intoxicant, but an autointoxicant (Mexican doctors hold that it sets up a fermentation in the digestive tract and brings on a stupid languor comparable to narcotic poisons), and the almost continuous use of tobacco, mark the scale up to the use by thousands of the lower-class Mexicans of the herb *marihuana*, a native variant of the hasheesh. The use of alcohol is all but universal among Mexicans. Climatic causes combine to make the immediate effect of use of liquor perhaps more pernicious than in lands in the temperate zone, and the fact that the Mexican of the lowest classes is likely to start his day with a *copita* (little drink) of native rum or alcohol, that he washes down his meals with *pulque*, or beer when he can afford it, the habit of taking a number of drinks before dinner, and after, make the effect of alcohol one of the most serious problems of Mexican vitality.

In sapping the strength of the Mexican people, probably no single factor is greater than venereal disease. Prevalent from one end of the country to the other, it is said that 90 per cent of Mexican men are affected. Recognized by the social organization as one of the inevitable facts of life, these diseases lower the vitality and sap the strength and mark the new generations with blindness and inherited weaknesses. Syphilis was probably introduced by the Spaniards, there being no confusion on this point in Mexico except the efforts made by some chroniclers of the colonial régime to confuse local

forms of leprosy with this Oriental plague. In Mexico, however, the disease apparently does not assume the virulent form noted elsewhere, and is said to respond promptly to careful treatment. In this, as in other diseases of uncleanliness, the apathy and ignorance of the people are the most serious factors.

On the subject of defectives and mental incompetents statistics in Mexico are almost completely lacking. A study of 26,000 students in the elementary schools of the Federal District made in May, 1913, recorded that 1,063, or 4 per cent, showed mental incapacity, 39 (only a trace in percentage) were listed as morons with retarded intellectual development, 108, or .04 per cent, were of "bad character"; which divisions, combined with others not specified, brought the number of children declared to be "really abnormal" up to 2,229 or 8.3 per cent of the total of 26,981. The number of deaf mutes in the republic in one year for which reports were made by the governors, 1897, showed 6,235, the population of the country at that time being about 13,000,000.[1]

The prevalence of goiter in Indian Mexico was remarked on and recorded in his reports by Prof.

[1] The following is the official, but probably inadequate, census of defectives in 1910:

	M.	F.	Total
Blind	7,116	4,746	11,862
Deaf mutes	4,644	3,130	7,774
Idiots	2,768	1,400	4,168
Cretins	1,829	801	2,630
Mental debility	2,840	1,971	4,811
Totals	19,197	12,048	31,245

Frederick Starr, previously quoted. In some places he found that astonishingly large numbers of the inhabitants were affected and confirmed the report that forty years before it had been even more common, by the surprising number of deaf mutes among the children. In one village he found that perhaps half of the people had goiter, sometimes in the most astonishing degree and yet without seriously affecting their work; deaf mutes were very often present in these goitrous families. There is undoubtedly a great deal more goiter and deaf-mutism than any records show, as it is found naturally in restricted communities where intermarriage has been going on for centuries.

The figures upon insanity have never been reliable, and even those which have been taken have not been published in digested form. In using Mexican statistics, one has always to remember that the material has been furnished by the local authorities, and that the principle of putting the best foot forward, which was one of the basic tenets of the Diaz régime, was followed with extreme literalness by practically all officials in the republic.

In general, however, it is safe to assert that the physical and intellectual defectives are not in extraordinary proportions. Students of the Indians agree that such signs of degeneracy as appear in Mexico are in about the same proportion as those found among the American savages north of the Rio Grande. Racial conditions, including the comparatively simple conditions of life and the natural checks on population, still combine to make the

question of defectives a very small item in the study of the Mexican people.

To sum up, the birth and death rates of Mexico indicate a primitive community of low vitality. The factors which directly affect them are racial tendencies, the climate and a prevalence of vices, undernourishment and apathy. Despite these depressing factors, the Indian still remains the strongest of the racial elements, surviving alike his own vices and living conditions and the diseases of the white man. The mestizo, almost in direct ratio with the increase of his white strain, is physically weaker, and, despite his improved living conditions, as a race is actually less resistant to the Mexican climate than the Indian. The white, as always in tropical lands, with difficulty holds his own.

More obvious, then, than race persistence, but linked inexorably with it, is the factor of health and its effect on the Mexican character and Mexican achievement. No person who is continually sick can be happy or can achieve greatly. No nation with such an overwhelming death-rate and thus sick rate can be an agreeable or active member of the councils of nations. Mexican race cannot be changed; its slow developments move on with the inevitability of a glacier. But Mexican health can be improved, and in its improvement the white world will have much to say and much to accomplish. If, in years to come, through government or private initiative, such work as was done by the American army doctors during the

Vera Cruz occupation, or as is being done in South America and the Orient by such elements as the Rockefeller Institute, shall come to Mexico, the outside world will have done mightier things than diplomacy and economic pressure can dream of.

VI

CASTES AND CLASSES

FROM colonial times Mexico's social organization has been characterized by distinct caste or class lines. Formerly these followed race divisions almost identically, and to this day parallels of class and race go deep into the fabric of Mexican life. To understand the significance of race we must uncover these deep-grown associations; to understand the cohesive elements in Mexico's population we must understand their relations to race.

When the Spaniards came, they brought this one definite and ineradicable class cleavage. The Spaniard was a white man, the Indian was a dark man, and the white man, whatever his social standing at home, whatever his occupation or rank, was the superior of any Indian. Effort was made by the king to preserve a recognition of the Indian aristocracy, but this lasted hardly a generation, and soon the race distinctions had stratified into the Spanish-American caste system. The colonial social structure recognized four grand divisions, first: the *peninsulares*, or Spaniards born in Spain; second, the castes, including the native-born whites and all

the mixtures of Spaniards with Indians and negroes; third, the Indians; and, fourth, the negroes. These strata persisted even beyond the expulsion of the *peninsulares*, and it is upon them that the social fabric of Mexico is built to-day.

The castes at the close of the sixteenth century, when they had taken definite form, were as follows:

Children of Spanish men and Spanish women—creoles
Children of Spaniard and Indian—mestizos
Children of Spaniard and mestizo—castizos
Children of Spaniard and castizo—españoles
Children of Spaniard and negro—mulattos
Children of Spaniard and mulatto—moriscos, or Moors
Children of Indian and negro—zambos

The castes and classes of the colonial period were, then, definitely racial. The Spanish whites despised the Indians and looked down on the creoles and mestizos with degrees of superiority varied directly in proportion to their Indian blood. The creoles considered the Spanish-born whites as their only equals. The mestizos were arrogant toward the Indians and servile to the whites. The Indians and negroes hated the whites and despised the mestizos.

Not a pretty picture, this, but a fair presentation of the feelings which marked, and indeed had no small part in creating, the colonial caste divisions just noted, divisions which continued with little variation well into the period of independence. The attempt to eliminate the "color line" and to inject a semblance of democracy into Mexican social institutions was largely responsible for the

change from "caste" to "class" divisions, a change without significance in the beginning, and with little significance even now, when the Mexican census takers vary it only to call the obvious upper class "white," the middle class "mestizo" and the lowest classes "Indian." There are distinct reasons for these race parallels. In the beginning is the now accepted fact that the caste and class divisions of Mexico do not go back to the Aztecs. There was in pre-Hispanic Mexico no hereditary nobility and no distinct class divisions except of the most primitive sort, certainly nothing approximating the elaborate social system which appeared early in the Spanish régime, a fact borne out by the apparent absence of caste lines within the distinctively Indian groups to-day.

The caste, and hence the present class, system of Mexico was brought in by the Spaniards, giving the dying feudal system of Europe a new lease of life in the New World. There were rapid shiftings of social position due to great wealth acquired in the mines and through royal grants of property and slaves, but to the end of the colonial régime no creole could hold high ecclesiastical office or the higher positions in the colonial government, and perhaps most significant of all, the new heiresses of the white aristocracy almost never married creoles; "a husband and fine linen come only from Spain," as an old proverb had it.

Below the pure whites, Spaniards and creoles, came the lower castes. The divisions were originally created by law, and at one time education was

allowed the mestizos only when they were the recognized descendants of Spanish soldiers.

Caste gripped Mexico in yet another way in the guilds which grew up under the viceroys. The most powerful were those of the clergy and the military, but physicians, miners, merchants, potters, even, all had their guilds and each guild its *fuero*, or special court, in which all matters dealing with members had to be adjudicated. The clergy with its great patronage became the most powerful of all the guilds, and at least from the social viewpoint the important feature of the Reform under Juarez was rather the abolition of the *fueros* with their caste privileges than even the nationalization of Church property or the religious upheaval.

The force of land ownership early came into the Mexican social scheme as a determinant of class regroupings. In Spanish times the number of land owners was very small and in their hands (and in the hands of the Church) was concentrated practically all of the real property of the colony, while the remainder of the population was almost without possessions. This gave a solid support for the caste system, but the emphasis on property, combined with the very instability of wealth in a new country, was powerful in the change from caste to class divisions.

The great *haciendas* helped to create a landed gentry upon which the upper class still depends, for through all Mexican history the *haciendas* have been the symbol of aristocracy. The middle class probably had its origin in a desire for emulation of

the rich and powerful, for the middle class of Mexico had its beginnings not in the time of Diaz, but in the days of the viceroys. Wealth was the privilege of the whites, but position, and with it opportunity, could also be enjoyed by the lower creoles and the mestizos. The desire for possessions and for place created, in the colonial era, the class of office-holders, or "bureaucrats," as the Mexicans call them, who were the first bourgeois of Mexico, a type as characteristic as the bourgeois of France, and at first composed largely of mestizo sons of Spanish officials. The creation of small nests of capital, either by graft in office or by business, gave the means first for acquiring Indian communal lands under redistribution plans, or bits of ancient *haciendas* after disastrous revolutions. First appearing in the early days, the increase in the number of ranches has gone on steadily, but the owners have not often been Indians, but rather the new *ranchero* class, usually mestizo, and usually definitely ambitious for social place and honor. In 1856 there were 2,860 great *haciendas*, the property of aristocracy, and about the same number of ranches, while in 1910 there were 8,872 *haciendas*, 26,607 ranches, and 2,479 small ranches, not counting the small Indian farms. We must, indeed, recognize the element of land ownership[1] as one of the great originating elements of the middle class of Mexico.

The *ranchero*, who is described at great length and with much dramatic effect in Mexican histories,

[1] Land distribution is discussed more fully in part ii, chap x, Conditions of Labor.

forms an interesting group from which have sprung the bandits and many of the revolutionary leaders. As far back as 1906, in talking with men of this type in far-off Tabasco, the writer learned that it was chiefly the political aspect of their class which interested them—they considered themselves a "new aristocracy," yet to come into its own. The peace of Diaz was to them, even at that time, an ephemeral condition and predictions of the revolution and the chaos following the passing of the great dictator were freely indulged in. Essentially selfish, but with a germ of true national consciousness, the attitude of these men was extremely significant as indicating the class bias which is now sowing and reaping the whirlwind of revolution.

In the cities and towns the lower middle classes and the upper lower classes were formerly tradesmen and small manufacturers, but the creation of a working middle class of Mexicans through industrial labor and organization belongs almost alone to the Diaz régime. The Mexicanization of the railways gave a tremendous impetus to the rise of artisans and lower executives, and in the later days of Diaz there was evolved, literally as the world looked on, a distinct class of Mexican machinists and trainmen, the conductors and brakemen being mostly mestizos, and the mechanics and enginemen largely Indians. In the training schools of the National Railways alone over 22,000 young Mexican peons were turned into skilled mechanics and enginemen, the nucleus of a producing middle class, in the course of some twenty years of American tutelage.

Thus it appears that, although race was the first determinant of class in Mexico, tradition, possessions, and industry have varied its effects. Nevertheless, while the "color line" has theoretically disappeared, class distinctions of to-day are still so sharpened by race as to be almost parallel to race groupings. The upper class is white, or nearly so, and includes practically all of the Mexicans of pure European lineage, but in it also are some of clear Indian stock, and it is doubtful whether the majority of the upper classes was not of mixed blood under Diaz, as what passed for "upper classes" certainly was under Carranza. On the other hand, although the lower classes are overwhelmingly Indian, the very lowest type of Mexicans are a group of fairly light mestizos, a strain of degenerates so numerous as to be given a distinct name—*leperos*. The middle class is mostly mestizo, and yet there are thousands of pure Indians who are properly included in this group of Mexicans who are rising by their own efforts.

Culturally, the race parallel in Mexican classes is largely through two lines—education and dress. For generations, the children of the Mexican whites have been educated, as far as could be, in Europe and the United States, and where that was not possible, in private, usually Roman Catholic, schools. From the beginning of Spanish rule, some of the mestizo children were especially provided for by institutions supported by the Crown—but the beneficiaries were only a few, and to this day the narrowness of the mestizo middle class is traceable

in no small degree to the limitations of its educational opportunities. The Indian has always been left almost to his own devices and to the limited teaching which the Church could give; under Spanish rule he was usually taught practically nothing but religion and the rules of politeness belonging to his class. The thirty years of the Diaz rule, with its pitifully inadequate educational program, mark the only era in which any attempt was made to break down this educational cleavage.

The dress of the Mexican does not concern us just here [1] but it suffices that from the London and Paris styles of the upper class, through the gradations of sartorial distinctions conferred on the mestizo middle class by native tailors down to the flowing white cotton pantaloons of the Indian, class and race lines are marked with the inevitability with which the cut of of a Frenchman's smock announces his calling.

Although at first glance the complicated class divisions which are set down by Mexican sociologists seem due to their Latin joy in delicate distinctions, the student of Mexican life early finds that these divisions are ingrained in the minds of the whole people.[2]

The very lowest class Mexicans are the *leperos*, the pariah mestizos, who have marked the country

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[1] See part ii, chap. viii, Clothing.

[2] Judge Julio Guerrero's interesting book, *La Genesis del Crimen en Mexico* (Mexico, 1908), and, to a lesser degree, Andres Molina Enriquez's *Las Grandes Problemas Nacionales* (Mexico, 1912), may be taken in general as the authorities for the class divisions described below, though the scaling is new.

in the foreign mind as a land where the natives touch water only on St. John's Day. They have no assured livelihood, and earn with difficulty the twenty or thirty centavos a day which keep body and soul together. They are mostly town dwellers, are subject to all manner of diseases, and almost invariably die in early life. Their language is an almost unintelligible argot, a combination of Spanish and Indian adorned with vile metaphors. Many of the *leperos* are astonishingly white, apparently showing a large admixture of Spanish blood, although this may be in reality an indication of the separation of the strain into its primordial types through interbreeding with close relatives, and thus of itself a physical sign of the degeneracy which their lives indicate.[1]

The lowest class of Indians includes not only the lower city types, but also a large number of those who still live in their distant villages and have almost no contact with the world outside, so that their social value is practically nothing. These village dwellers produce enough food for themselves, but none whatever for the market, and where they have found their way into the cities live in crowded hovels, degenerated by the alcohol and the diseases of the white man.

Slightly above the *leperos* and the low-caste Indians come the soldiers and their women, a class of Indians and mestizos practically unintelligent save on the animal plane, but the men wearing presentable clothes and the women camp followers

[1] See p. 41.

showing some improvement over the women of the *lepero* class.

From the soldier the transition, still in the lower class, is easy to the unskilled "slave" laborers of the *haciendas*, Indians and mestizos, some of them fair workers, essentially animal in instincts and appetites, yet imbued with certain ambitions. On the man's part we find here the desire for a great *sombrero*, and for prestige as a gambler and as a person of bravado, especially when he is in his cups. The women begin wearing copper and ebony finger rings, and silk handkerchiefs draped over their dirty rags indicate the beginnings of adornment. The men of this class, both Indians and mestizos, wear white pantaloons and shirt, and the women nondescript dark cotton dresses topped with the eternal blue cotton *reboso*.

The free, unskilled laborers are slightly above this group. These are the men who earned about a peso a day in the time of Diaz, and who maintained some semblance of a household. The men of this class in the cities have begun to wear cloth trousers tight at the ankles and blouses instead of the white cotton suits just described, although they still wear sandals instead of shoes. The women wear long dresses of printed cotton, their hair is combed and braided, and, while they usually go barefooted, on state occasions they appear in high patent-leather shoes, but without stockings. There is some legal marriage in this group, but it is not common. The women are faithful to one man at a time, however, and are generally religious. The

men usually have several affairs on hand which cause frequent quarrels and often bloodshed. In the cities this class lives in the unhealthful *casas de vecindad* where single rooms furnish a home for eight or ten people at a time. They are entirely illiterate and often know nothing of the world beyond the immediate neighborhood in which they live and work. The use of artificial light begins with this class, and there is some furniture, first a rough table and chairs, even a bed of boards with a thin straw mattress.

Next above come the Indians of better breed, the enterprising truck farmers of the city suburbs, the makers of baskets and pottery, a most important and interesting division of the aboriginal population, men and women of a degree of genuine intelligence, hopeful, intent on their work, living lives circumscribed by tradition and by ignorance, but capable of development, able to discuss their own small affairs, their own legends and superstitions, with native wit and shrewd appraisal of the listener. These are all native types, unmixed with white blood, but clean, self-respecting, and capable of real development under wise educational methods, could those be continued through several of their short generations.

Above this class come the servants. They are paid low salaries but receive money with which to buy for themselves their *tortillas*, beans and *chile*, for they do not eat or like the more delicate foods of the upper classes. Industrial workers were being recruited from this class in the closing years

of the Diaz régime, and it was distinctly a feeding ground for the lower reaches of the middle class. An interesting division is the country Mexicans who work as servants in the cities, saving their money in order to return in wealth to their home villages. These are found in all cities, and especially in the capital, and indicate the growth of forward-looking ambition. They usually work as husband and wife and have been married in the church. In this class are both mestizos and Indians, the former predominating.

In the industrial field the employees are still to be considered as belonging to the lower stratum, for there is only the faint beginning of industrial ambition, and the limitations of class are heavy on the minds of the workers. The disturbing factors of socialism and the political chaos in Mexico to-day are transforming many members of this class, but the group itself remains, the more ambitious ones merely passing into other divisions. The simple-minded factory worker toils on stolidly, poorly paid as we judge it, but better than he has ever been at anything else. This class remains at its work, strangely enough, through all the turmoil of revolution, the firm, lower class upon whom such a land as Mexico must still depend for a few years longer.

From these we move into the middle class proper, if we may make the arbitrary division. And at the bottom may be placed the policeman of the cities and the rural police (of the Diaz time) of the country. Here is a man who can read and write a little, and on his shoulders his responsibilities rest with a

Castilian pompousness, perhaps, but still with some degree of safety for the commonwealth. Next comes the new class of skilled artisans, distinctively the growth of the Diaz régime, and typified by the railway employees, both mestizos and Indians, who carried on the traffic of the steel highways with some efficiency as the Americans were gradually replaced after the merger which created the National Railways of Mexico in 1908, though, since the expulsion of all foreign executives in 1914, their success has not been so marked. Noncommissioned officers of the old army, the clerks in the stores and the small shopkeepers, the real beginnings of the middle class of the republic, follow in ascending grade.

This lower middle class should also include the lower clergy, who are often placed in the lower class, although, with all their defects, they are to a certain extent educated, and although poorly paid and not always carefully selected, do wear shoes—an unfailing mark of class distinction in Mexico. These priests and curates are Indians or low-caste mestizos.

In dress the lower middle class is distinguished by shoes and by ponderous black felt hats, while the women wear the black merino shawl instead of the eternal blue cotton *reboso* of the peon women, have calico dresses, worn very long, also in unmistakable cut. Corsets and lingerie are almost unknown, but they use handkerchiefs, as do the men, and knives and forks, though napkins are in the distant cultural future. The residence is in a flat or tiny hut of two or three rooms, fairly clean and furnished.

Masculine fidelity is not frequent, but the women are faithful and good Catholics.

The upper ranks of the middle class include the government clerks and minor officials, the "bureaucrats" who go back to the mestizo government employes of colonial times. They approximate the English clerk class in many ways, live and dress well, have distinct codes and manners, and are extremely ambitious socially.

In times of revolution, the bureaucratic division of Mexican society suffers from strange and astonishing invasions. All the generals and bandits who rise to power invade the cities and seek and achieve recognition and welcome from the often cringing politicians. Quite incapable of entering the ranks of the intellectuals or the aristocracy, they are ignorant of the existence of the former at least and content themselves with basking in the light of the society of the bureaucrats and their families. But these temporary accessions almost all ultimately slip back in the scale, for they find the exactions of bourgeois society very wearing.

The men of the bureaucratic class are well dressed in the native variants of European style, as far as their incomes allow, and their women follow the Mexican version of Parisian fashions. All the foibles of the hour are found, often worn only as a badge of position before the outside world, but at least owned and enjoyed as such.

At this point in the class scale we find the first foreigners. The Spanish clerks are the lowest, but their long hours of labor in the grocery stores often

result in their accumulating a small capital and perhaps marrying the daughters of their employers or middle-class Mexican girls, settling down and remaining as part of the Mexican middle class of merchants.

Next come the Frenchmen, in the pre-revolution days typified by the dry-goods clerks, called "calicoes," an unstable, non-marrying class which seldom remains long in Mexico. The French colony of business men is, however, a substantial and powerful element, ranking with the best English and Americans.

The Germans are next in the scale, having come to Mexico as clerks and accountants, learning Spanish quickly and thoroughly, and settling down in Mexico, very often marrying Mexican girls of wealth. Germans have always wielded considerable power in Mexico, and under Carranza, owing to political machinations, were the most important element of the foreign population.

The Americans and the English stand at the head of the list of foreigners. Under Diaz the Americans were divided, not only in their own cliques, but also in the Mexican mind, into a lower grade represented by the railway men and, as it happened, the fakers, adventurers, and tramps, and the higher ranks represented by the railway executives, bankers, business men, and those interested in industries. The latter, with whom must be ranked most of the British in Mexico before the 1910 revolution, undoubtedly wielded much influence, due to their financial standing and their genuine interest in and

identification with the development of the country. The Mexicans, however, justly regarded them as temporary residents and noted their inability to mix socially with the natives, and the extremely few international marriages.

The true upper class of the Mexicans themselves is made up first of the members of the professions, a numerous group of lawyers, doctors, engineers, teachers, artists, newspaper men, etc. Like China, Mexico gives rank and place to all who would become her mandarins of professional life, no matter what their origin. A vast majority of these professional men have no standing as intellectuals, and do not seek it, but, because of their education and degrees, take definite social place.

Above the mass of professional men, but below the true intellectuals, come the business men, who were interested, often with foreigners in the old days, in national enterprises. This class of "self-made men" was one of the great achievements of the Diaz régime, and it is to these whites and mestizos who have got close to Mexico's problems that we must look for the practical side of the regeneration of the country. After the passing of Diaz, and during the brief rules of de la Barra and Madero, they sprang to the front with working theories on the more idealistic side of the lines in which they had been engaged in the days of Diaz, and to-day many of them, in exile, are continuing their plans against the time when they may return to work them out.

Next above come the true intellectuals of Mexico,

a group of men not confined to the capital by any means, but well educated in the Latin sense, keen students of their country and its problems, men capable of taking a place in any company, scientists, philosophers, teachers, writers, poets, archæologists, sociologists, and economists.

The aristocracy, based on heritage of blood and property, stand at the top. Here are most of the *hacendados* and many of the government officials under the old régime—almost all now in exile, but an important part of the Mexican social organization. These upper classes, practically all Spanish creoles, as one has said, "preserve the graces of the Bourbon period of France" with charm and elegance. When they have dabbled in business other than the management of their great farms or *haciendas*, they are often successful, and in the elegant arts and the elegant professions of the law and the Church, have attained not a little of the perfection of accomplishment which fills the imagination and suits the picture of true aristocracy. As a rule, this class has never occupied itself with politics, but has left to the middle class the determining of policies and the carrying out of revolutions. There are, of course, genuine and significant exceptions. Those capable aristocrats whom Diaz gathered around him were men of birth and genuine executive ability. Whatever may have been said regarding their probity or their wisdom, the magnificent efforts which they devoted to the great Mexican problems during this period more than outweigh the criticisms which have been showered

upon them. That they were aristocrats to the bone, that their attitude may have been at variance with modern sociology, that their economics may have been faulty, that their business instincts may have been archaic, does not change the fact that the Mexican aristocracy had a tremendous responsibility and to a certain extent its individuals fulfilled that responsibility.

This group has been destroyed or scattered from Mexico by her political upheavals. Practically no strong men of high type have appeared in the revolutionary horizon, and, indeed, in the whole Mexican field to-day there is no true upper class. The aristocrats are in exile, the intellectuals who gave color and idealism to the Madero revolution have either died at the hands of the bloody successors of Madero or are in exile like the old aristocrats, stigmatized as reactionaries. All this may indeed be the fault of the men who surrounded Diaz and who failed to lift the level of the dull, unthinking mass toward their own intelligence, the recurrence of the age-old failure of those in power to raise up a generation of strong men to succeed them.

It seems, however, that in this, as in all else in Mexico, we must trace our way slowly back to race, to the long lethargy and apathy of racial stratification, and see not the failure to do more, but the wonder that they could do so much. For three hundred years Mexican race castes evolved slowly into the Mexican class divisions we have seen here; for only thirty years was it possible, on the social plane, to apply modern government and

sociology to the problem. Race built the solid wall to which caste and class have conformed themselves, and back to race we must go again for our understanding of the class line and for the solution which will some day be found—a solution of race and of education, the elements through an understanding of which came the brief development of that middle class of artisans who are to-day lending almost all there is of stability to Mexican government by bandit and bureaucrat.

PART II
HOW THEY LIVE

I

CLIMATE

MEXICO lies in the midst of the Americas, a great cornucopia, but the riches and the fruits hidden therein do not pour forth with the prodigality of legend. The mouth of the cornucopia is rigidly upright, symbolic of the situation throughout the history of this traditional treasure house. For four hundred years Mexico has stood in the vocabularies of those who have talked of her as a horn of plenty, a land lavish beyond dreams, but she has yet to record the real pouring forth of any gargantuan riches. Gold and silver, yes; but gold and silver, and the oil which to-day rivals the minerals in production, are the impersonal, tangible wealth which belongs to the world and to anyone who can carry it away. The wealth that pours from cornucopias is the wealth of fruits and grains, of fabrics and of manufactures, the wealth that is essentially and personally that of the people and of the nation.

Since the days of the conquerors Mexico has been thus extravagantly described, and yet, since those days and long before them she has proven anything

but a horn of plenty for the inhabitants of the land. Despite the wealth which has been wrung from beneath her soil from mines and oil wells, she must rank as an essentially poor country. Lying almost entirely in the tropics, where, theoretically, fruits and flowers grow in profusion, in reality nearly three-fourths of Mexico is desert, and of the entire area of about 500,000,000 acres not over 25,000,000 acres can be called suitable for the production of the agricultural products which the people need.

Climate is the chief determinant of the conditions under which Mexico's inhabitants must live, the overwhelming element of her environment. That the zone of achievement which belts our globe is confined almost entirely to the north temperate zone is no mere accident of topography or race distribution. In that zone there are benignant winter snows which nurture the cereal crops, and summer suns that ripen them; there is a broad distribution of rainfall throughout the year; there are clay subsoils and vegetable molds and great river systems with rich valleys and well-drained highlands. In tropical Mexico there is no winter season. The climate varies from scorching desert to dank jungle, and from the glaring sands of the Gulf to the delightfully equable seasons of the mountain slopes, but snow never falls upon her wheat fields and rain comes either in a short, uncertain "rainy season" or in tropic torrents that vitiate agriculture by their unhappy abundance.

Overwhelming is the influence of rainfall in

Mexico, but behind it are the five great factors which always determine the relation of climate to human progress. The first of these is the mean or average temperature in its relation to physical energy; second the mean temperature as related to mental activity; third, the variation and range in temperature; fourth, humidity; fifth, altitude. The ideal climate has a mean summer temperature of 65°, giving the season most favorable to physical exertion, and a winter temperature of 40°, the greatest stimulant to mental activity. The ideal variation in temperature would give some warm days in winter and some cool days in summer, produced by such ordinary storms as vary the climate in the United States and England. The favorable condition of humidity is about 60 per cent at noon in summer and nearly 100 per cent at night, producing dews after sundown. The ideal of the fifth point would be an altitude of not more than 3,000 feet.[1]

Mexico has three distinct types of climate, to be found in three definite geological zones. The *tierra caliente,* or hot country, is the lowland section along the coasts from sea level to an altitude of 3,000 feet, where the yearly average temperature is be-

[1] These limitations of the "optima" of climatic efficiency are those of Prof. Ellsworth Huntington of Yale, the great American climatologist. Much of the climatic data in this chapter is also due to his courtesy and to his published and unpublished material, including "The Relation of Health to Racial Capacity—The Example of Mexico," *Geographical Review,* 1920, and "The Factor of Health in Mexican Character," read at the Clark University Conference on Mexico and the Caribbean, 1920.

tween 76° and 88° Fahrenheit. The Mexican includes in the hot country not only the lowlands south of the Tropic of Cancer, but the whole coastal plain up to Matamoras on the Gulf of Mexico and to California on the Pacific. The *tierra templada* lies along the mountain slopes and in the lower plateaus, including the sections whose altitude is between 3,000 and 6,500 feet and where the annual mean temperatures are between 65° and 76°. This climatic zone includes most of the area of the northern deserts as well as the finer southern mountain slopes and lower plateaus. The *tierra fria,* or cold country, includes the high plateaus and the mountains, the section of Mexico lying between 6,500 and 12,500 feet altitude, where the yearly average temperatures vary from 30° to 64°, although in reality the temperatures of the populated sections are generally 50° or above. The three climatic zones each cover approximately one-third of the area of the country. About half the inhabitants live in the cold zone, and roughly a quarter each in the temperate and the hot country.

The three zones naturally have differing relations to the climatic factors set down above, but it should be remembered that these differences are due more to altitude than to latitude. The following table, taken from official reports, gives a picture of the relation of mean temperatures and seasonal range to these elements of latitude and altitude. The table is arranged with the most northerly towns first, the most southerly last:

	Mean Temperatures		Seasonal Range	Altitude
	Coldest	Warmest		
	Fahrenheit	Fahrenheit	Fahrenheit	
Matamoras	63	84	21	Sea level
Monterrey	56	85	29	1,600 feet
Saltillo	53	73	20	5,400 "
Durango	54	73	19	6,200 "
Zacatecas	52	66	14	8,200 "
San Luis Potosi	55	71	16	6,200 "
Merida	72	83	11	Sea level
Mexico City	53	65	12	7,500 feet
Vera Cruz	70	82	12	Sea level
Oaxaca	63	73	10	5,162 feet
Salina Cruz	75	82	7	Sea level

The first and second of the five climatic elements mentioned are the mean temperature in its relation to physical and mental energy, 65° being the best for the former and 40° for the latter. At Vera Cruz the mean temperature of the coldest months of the year is 70°, which is 5° higher than that favorable to physical health and 30° above that which is best for mental activity, while in summer the average is about 85°, which is more than 10° higher than the hottest month in New York City. In general, in the hot country, the body struggles with a temperature averaging 20° higher than its best efficiency, but the brain, with the handicap of 40° more than the relatively mild winters of the temperate zone, tends literally to stagnate. In Mexico City, on the plateau, the coldest month averages 53°, which is 13° higher than the best temperature for mental activity, and the warmest month is 65°, which would be the ideal for physical exertion, if altitude and humidity were not unfavorable.

In the most densely populated section of Mexico,

in the so-called "cold country," the coolest month does not average below 50°, which is the temperature of April in New York City, and half the people of Mexico live where the coolest months average 60°, the temperature of May in New York. In addition to the low stimulus of this temperature to mental activity, the monotony of the endless spring days which it predicates has another effect on physical health, for it seems to make the Mexicans and even the foreigners who have long resided there extremely sensitive to cold, so that they have little power of resisting even the relatively mild chill which accompanies the "northers" or prevailing storms from the Gulf of Mexico.

It is the location of Mexico within the tropics that is responsible for the enervating sameness of temperature which gives almost the whole country the most debilitating type of weather from the viewpoint of variety. There is little variation in temperature even in the procession of the seasons, and winter and summer are but slightly distinguished even in the cooler regions. The northern part of the country is in the temperate zone, but even there the difference between the coolest and warmest months is but 25°, which is only one half the seasonal variation of Chicago. In tropical Mexico (and this includes both "hot country" and "cold country," for both are below the Tropic of Cancer) the seasonal variation is only 10° to 15°, a quarter of the seasonal variation of New York. In Mexico City (altitude 7,500 feet), for instance, the differences in mean temperatures between January and

May, the coldest and warmest months, is 13°, while in Vera Cruz, at sea level, the similar difference is 12°, for the two cities are in the same latitude.

There is a considerable variation, however, between day and night on the high plateau as well as in the north, though in the lowlands night and day are much alike. There is about 25° difference between day and night in such plateau towns as Oaxaca and Zacatecas, but at Vera Cruz the average is but 6°. This variation might do much to save the health and energy of the plateau dwellers if it were not for the custom of shutting themselves up at night and covering their mouths and noses whenever they go out into the night air. There is a tradition in Mexico that the night air is poisonous, and surely it tends to become so when one refrains from sleeping or going out in it. However, no one who maintains fresh-air habits in Mexico suffers from the night air.

In contrast with the variation between night and day is the practical uniformity of one day after another. The average change is less than 2° Fahrenheit, so that one can predict the type of day from one year's end to another. In the United States the change from day to day is three or more times that of Mexico. The only daily variations in temperature come in the sudden "northers," whose changes are likely to be more dangerous than healthful, and in the brief respite from summer heat which follows the showers of the "rainy season." The "cold country" is often visited by frosts in the winter, but these are disastrously un-

certain and have almost no stimulating effect, owing to the traditional fear of night air. So complete is the sameness of the temperature that victims of "colds" at almost any season in the Mexican highlands find a trip to the *tierra templada* indispensable in order to get the change needed for a cure.

The humidity of Mexico could hardly be more disadvantageous to health, physical and mental. In the rainy season the saturation of the air often reaches 95 per cent even in the "cold country," and in the dry season it falls to virtually nothing. In the "hot country" summer air reeks with continued moisture, and the combination of high temperature and a water-soaked atmosphere is extremely depressing; in the dry season, whether on the northern deserts or on the plateau, the lack of moisture in the air seems nerve racking and destructive to mental poise.[1]

In altitude, the hot country of Mexico, being close to sea level, is well below the 3,000-foot maximum limit for the best climatic efficiency, and so furnishes the one favorable condition in this section. On the other hand, on the table-lands of tropical Mexico, the elevation, well above the efficient limit, is the chief deterrent factor, and the favorable feature is the fact that the mean temperature of 65°, as well as the averages for winter (about 55°) and for summer (about 70°), are close to the ideal for physical health. Here the Indians are strong and hardy, but the endless train of

[1] Cf. E. Huntington, *World Power and Evolution*, p. 85.

delightful but unstimulating days combines with the wearing altitude to reduce the vitality of the more nervous types, so that we find prevalent a physical laxity surprisingly like that of the lazy hot country. The result, then, is that, as far as his general attitude toward life is concerned, the Mexican is very much the same the country over, the only difference being in the physical strength and endurance (though without great energy) of Indians of the high plateaus, which has been traditional since the days of Cortez. Among the whites and many of the mixed bloods the combination of altitude and dryness has a definite effect on the nervous system, and the traditional excitability and instability of the creoles may, therefore, have a clear climatic explanation.

This is the background of temperature, humidity, and altitude upon which the yet more important factor of rainfall is thrown into relief. The rainy season all over Mexico extends roughly from June to September, and the dry season from October to May. Still well north of the equator, Mexico has practically the same divisions of the four seasons as in the United States, but these seasons in Mexico are marked by rain and drought more sharply than by the variation in temperature. Without going too deeply into the reasons for the rainfall conditions in Mexico, we may summarize Professor Huntington's analysis of the three main climatic conditions of Mexico; first, the summer rains due to the vertical rays of the sun at that season; second, the great stretches of desert in the north,

due to the same conditions of trade winds and high barometric pressure which make the Sahara desert; and third, the winter storms which are popularly called "northers." The direct rays of the sun falling upon the central portion of Mexico in summer heat the earth and thus the air; the heated air rises rapidly and the sudden expansion brings about the condensation of moisture into clouds and rain. The great stretches of desert in the north are the result not only of the general circulation of the atmosphere, but also of the mountain contour combined with the distance from the eastern seashore and the influence of the so-called continental type of climate which has formed the American desert farther north. The "northers" are the fringes of the storms which sweep over the United States in winter and sometimes carry frost as far south as Florida.

The obvious results of these three climatic tendencies are the contrast between the very wet southern portion of the country and the very dry northern; the very wet rainy season and the dry, almost rainless winter; the contrast between the eastern slopes of the mountains, which are moist, and the dry western slopes, and the contrast between the usual warm sunny winter days and the occasionally raw, chilly ones which are to the Mexican more trying than is zero weather to the natives of the temperate zone.

The rains usually fall during the rainy season for a few hours in the early afternoon, and are accompanied by thunder and lightning. In the south the

rainfall is often almost continuous, but there are sometimes intermissions, after which the rain seems to come with renewed vigor, sometimes a fall of six inches in thirty-six hours following a period of drought. In the central regions of Mexico the rainfall is moderate and fairly well marked by the seasons, so that it is here that agriculture flourishes and the centers of population have grown up. Here the rainfall is about the same for the year as in the United States—from thirty to fifty inches. On the west coast and in the north the rainfall is very slight, western Sonora, for instance, ranging from five to thirteen inches, while Lower California is sometimes dry for years on end. The length of the wet season varies with the annual rainfall, from seven months (October to May) on the plateau, with thirty to fifty inches a year, to ten months in the jungles of Chiapas, where there are one hundred inches a year.

Influencing rainfall and also the distribution of arable land is the contour of the country. Two thirds of all the territory of Mexico is covered by mountain ranges. These are in the form of an immense "Y," the two upper points skirting the borders of the cornucopia, joining near the center of the country and covering it broadly to the south. On the eastern, or Gulf, side there is a wide coastal plain, but on the west the mountains extend almost to the Pacific. Between the two arms of the "Y" in the north are the great desert stretches of Chihuahua, Coahuila, Durango, and Zacatecas. The rainstorms of Mexico come generally from the Gulf

of Mexico, and the eastern slopes of the Mexican mountains are, therefore, well watered; the Gulf coastal plain is covered with jungle growths for almost its whole length, and the eastern sides of the mountains are always a surprising contrast of verdure to the western slopes. This seems due to the fact that the winds blow almost invariably from the east and northeast, the rains being precipitated by the mountains, while the clouds rise to the summit and pass over the western side without precipitation. The most important agricultural sections of Mexico, and at the same time the most satisfactory regions for human habitation, are the plateaus and valleys on the eastern mountain slopes and the great table-land of south central Mexico, which vary in altitude from 4,000 to 7,500 feet and comprise the most densely populated and most prosperous sections of the republic.

Although the contour of Mexico would indicate that there should be great rivers, there are practically none. Half a dozen partially navigable streams pour into the Gulf of Mexico, but the distance they traverse is, except in the case of those of the state of Tabasco, so slight as to make them of little value either for transportation or irrigation. The rain which falls on the mountains in and around the plateau country creates practically no rivers save at the height of the downpour, the moisture being absorbed in a porous soil, to be carried down under the surface to points on the eastern face of the mountains, where they spring out again, forming sudden waterfalls and riotous mountain streams.

The "hidden river" is a commonplace in Mexico, as are great waterfalls which tempt the engineer to dream of immense irrigation projects and great water-power developments. But such engineering enterprises have proven extremely and often unexpectedly expensive, owing to the porousness of the soil and the shortness and irregularity of the rainy season. Immense storage facilities are vital to any such plan in Mexico, as was discovered at Necaxa (when the hydro-electric power for Mexico City was developed). There it was found that although an immense head of water—about 1,300 feet—could be obtained, dams in the narrow mountain valleys could hold back only a small percentage of the water which came down in the torrential rainy season. Attempts to hold water in the plateau above were either ineffectual or extremely expensive, owing to the fact that, although an ordinary dam would create a vast reservoir, quantities of the impounded water would seep through the soft soil and porous rock and actually waste away into hidden springs and underground rivers before it could be used for power generation.

There has, however, been irrigation in Mexico from time immemorial. Many of the communal lands of the Indians before the Spaniards came were irrigated through long canals, and the distribution of property was often upon the basis of the amount of land which could be cultivated with the water which was allowed the individual farmer—in other words, the water was the desirable property, and the value of the land was recognized as dependent

on water rights. There was, however, no storage against the dry season, and this irrigation was practiced only where the streams, fed by springs, flowed the year around, or where water could be lifted from underground rivers by the crude native foot wheels.

Toward the end of the Diaz régime a number of franchises were given, mostly to foreigners, and the sum of P90,000,000 also set aside for the development of irrigation. Under the Mexican laws of that period all such irrigation projects were allowed only on the provision that the concessionaire on the completion of his work should turn over to the Federal government a large share of the irrigated lands for distribution in small agricultural holdings; in some cases the amount to be given the government totaled more than a third of the lands which were watered. This was the beginning of a thoroughly intelligent distribution of land, as under this plan the property would be really available for cultivation, in contrast with the revolutionary schemes of redistributing land almost worked out or unirrigated land not adapted to the growing of food crops. In a country like Mexico irrigation must be done on a scale which only large capital or government can compass, and without irrigation land distribution to farmers who have no capital has proven worse than useless.

The complicated land question of Mexico is, in the last analysis, one of climate and rainfall. Mexico's agrarian problem has been succinctly stated as being, not the mere distribution, but the

actual creation of lands for the people. As noted at the beginning of this chapter, only about 25,000,000 acres of the 500,000,000 of Mexico's area are arable, a fact due primarily to rainfall and the other factors of climate. Irrigation is the only means of "creating" new sections of arable land, and land distribution, legal or revolutionary, will not improve conditions unless the land can be successfully tilled.

Great sections of Mexico are arid; the state of Chihuahua, 90,000 square miles in extent, has only about 125,000 acres (two tenths of 1 per cent) of arable land, most of that irrigated, while other desert states have only 2 per cent or 3 per cent of their area under cultivation, a condition due far more to rainfall conditions than to ruggedness or any other factor. Even the production of the soil that is cultivated in Mexico is not only low, but it is rapidly decreasing, due to the wasteful extensive farming methods (as contrasted with "intensive farming"), in the creation of which weather conditions have had much to do. Baron von Humboldt wrote in 1803 that the production of Mexican farms was 150 fold (that is, 150 grains of corn for every grain sowed). This is estimated at about 86 bushels per acre.[1] To-day, on the other hand, an average return in the typical agricultural district about Monterrey (where the rainfall is twenty-two

[1] This astonishing figure, astonishing in fact as well as in comparison with present Mexican corn crops, is given as the equivalent of a 150-fold return by Francisco Bulnes in *The Whole Truth About Mexico*, p. 44. Mexican farmers still count their yield by the return per seed planted.

inches per year) is 7 bushels per acre for dry farming, 15 for land under irrigation, and 25 bushels per acre with selected seed on the fertilized and irrigated farms of a Canadian company, whose prize plot of 70 acres produces 52 bushels per acre. When it is remembered that over forty-five years, good and bad, the whole state of Kansas averaged 22 bushels of corn per acre, that fair Kansas corn land produces 35 bushels, and the best farms, over their full area of 160 to 320 acres, 75 bushels per acre,[1] one can gain some realization of the conditions which the climate has forced on Mexico.

The figures for the Monterrey section are taken because they not only show the poverty of ordinary production, but the appalling scale of difference between the dry-farming product, the ordinary irrigated, the well irrigated and fertilized, and the "prize" sections where acclimated Kansas seed corn is used. There are especially fine corn-growing farms in Mexico where returns of 100 bushels per acre are obtained from two crops, 50 bushels per crop, but even there the rainfall conditions are such that crops of this sort are harvested only once every five to ten years. Average crops of the good corn-raising sections of Mexico are 8 to 12 bushels per acre, under dry-farming conditions. The use of good seed and deep cultivation are to a very great extent responsible where there are good showings, but above all the climate and rainfall, including both total precipitation and favorable distribution

[1] Data furnished by J. C. Mohler, secretary, Kansas State Board of Agriculture.

throughout the growing season, are the chief factors of every successful farming community.

The climate may thus be held largely responsible for most of the poor crop conditions in Mexico. Without irrigation the uncertain rainfall and the fact that much of what falls is so irregular or comes at such times as to be useless, create a condition where intensive farming only adds to the expense without making the crop any surer. The Mexican dry farmer is the greatest of all gamblers, for where in England a crop of 85 per cent of average is a calamity and in Germany before the war a 90-per-cent crop was a serious matter, the Mexican farmer is not discouraged if he averages crops that are but 25 per cent of normal. Farming in Mexico is handled on the basis of "getting out" if there is a good crop every seven years, and Mexican crop experts hold that if intensive farming were followed, the increased cost, with weather conditions always against the farmer, would eat up all the profit possible from the increased yield in the good years.

Under these conditions most efforts to induce intensive farming have been futile, and will remain so until irrigation can be harnessed to give assurance of the moisture which is the primary requisite of all agriculture. Baron von Humboldt's conclusions regarding the rich future of Mexico were undoubtedly based on the belief that intensive agriculture could be made successful—his rain statistics were, in 1803, inadequate and most inexact. But the country continues to-day, one hundred and

twenty years later, as she has for untold centuries, on the plane of the most wasteful of extensive cultivation, save only where irrigation has given impetus to industry and where long tradition has softened the crudeness of Indian wastefulness.

It is impossible in a work of this general character to go farther into the land and crop problem, but it should be noted that, owing to weather conditions, the so-called ninety-day corn requires about one hundred and twenty days to mature in the temperate zones, and on the plateaus, where most of the food crops are raised, it grows no more rapidly than the ordinary varieties, requiring six or seven months to ripen. This long growing season and the danger of frosts in this section add another factor to the uncertainty of climate.[1]

For Mexico knows famine—to her bitter cost. The single phase of climate may not, indeed, be the only factor which contributes to the recurring ravages of hunger, but beside it such problems as the system of land distribution, the difficulties of communication and the customs which place one third of the corn production in the hands of small farmers who raise only enough for their personal needs, are greatly minimized. Indeed, in the last analysis, climate has much to do with these problems, for land distribution has been to a certain extent determined by climate; the lack of rivers and the poor roads certainly have a climatic first cause, and the apathy of the Indian farmer, who hopelessly plants only enough corn for himself because all the

[1] Francisco Bulnes, *op. cit.* p. 47.

odds are against his getting a crop anyway, is in part at least due to the discouraging rainfall.

But in the larger sense we have seen climate and above all inadequate rainfall as the great Nemesis which ever hangs over Mexico, the most cruel and evil genius of her destiny. Indian tradition reaching back into farthest antiquity told of famines succeeding one another, and one of the high spots of Aztec civilization was the fact that there had not been a devastating famine for forty years! Under Spain there were serious droughts and periods of great suffering, and during the time of Diaz Mexico was often saved from similar experiences through the medium of world distribution which brought the surplus of the United States and Argentine to her rescue.

Baron von Humboldt, studying Mexico in 1803, wrote many basic truths about Mexico, as well as laying the foundations for many of the fantastic claims which still persist regarding her wealth. He spoke again and again of the famines which wasted Mexico in historic time, and added that "the disproportion between the growth of the population and the increase of the food supply through cultivation renews the sad spectacle of famine whenever, through a great drought, or some other local cause, the corn crop fails."[1] Always those great droughts menace, and since the failure of government to make irrigation possible and the destruction of the great estates which, despite

[1] Alexander von Humboldt, *Political Essay on the Kingdom of New Spain*, vol. i, p. 69.

their mistakes, did furnish something of the large organization necessary to food production in Mexico, the great droughts which the climate will inevitably bring loom more terrible than ever. No Joseph is in Mexico to warn her dusky Pharaohs, and were he there, there is no surplus to store up—only the despised *hacendados* had the organization to raise a surplus and the wisdom to store it.

For famine still stalks in Mexico. It is easy to attribute the growing importations of food into Mexico during the Diaz period to the diversion of increasing numbers of her laborers to industry, but the erratic variations in the importations were undoubtedly due to more or less serious crop failures. Since the revolutions there has been another easy explanation—the bandit raids undoubtedly have discouraged food raising for the market. But in 1917 there was a genuine famine in northern Mexico which was not due to banditry. The official American records show the facts, for the city of Monterrey was saved only through the enterprise of her American residents, who imported many carloads of corn, contributed by the American Red Cross, to feed the people. The direct cause of this famine was a serious and far-reaching drought, but the world was very busy in 1917, and because the famine was not the result of banditry primarily, it passed with little notice. But famine it was, and famine with direct climatic causes.

And famine will come again, and again it will be traceable directly to climate, and it may well happen that the next great climax in Mexico's

history will be a nation-wide hunger which her strength, sapped by war and graft, cannot avert, which no charities can alleviate, and which no fair words or glowing promises can conceal. For Mexico is still in the making, and still heredity and environment, race and climate, are determining the nature of her people, race the great matrix in which mold was cast, climate the chisel which has shaped the conditions under which they live and the health which inexorably decrees the way in which they think.

II

THE MEXICAN COMMUNITY AND ITS GOVERNMENT

THE Mexican community consists of a population of some 15,000,000 mixed Spanish and Indian peoples distributed, chiefly in villages and small cities, over a triangular, largely mountainous, area of 767,000 square miles lying to the southwest of the United States. Its government is a republic of thirty states and territories, patterned in theory on the federalized system of the United States, but in actuality centralized and dominated by the national ruler or dictator, from Congress and the judiciary down to the most insignificant village official.

The community life and the system of government are alike the result of the combination of the customs and systems of the two races which make up the people. In the larger phases of government, however, it is the Spanish heritage which is strongest, while in the community life and in the systems of rule in the villages and even in the larger towns, Indian tradition and standards dominate.

The feudal system, which had all but passed in Europe when Columbus set sail for America, was

transplanted bodily to the Spanish colonies and became the chief basis of their government for the three centuries of colonial rule. Since the independence, although the forms of Mexican government have changed often, and bloody wars have been fought over the theories and practices of republican rule, the actual spirit of the central government has continued Spanish and almost feudal, even down to this day.

The conditions of Indian community life have continued in Mexico with similar persistence. When the Spaniards came to Mexico in 1521 they found the Indians possessed of a communal organization upheld by traditions which went back so far into prehistoric times that there was no memory of any other life. The basis of the political form of tribal organization was the common ownership of land with the parceling out of portions to the individuals who were able to work them, a sort of temporary tenancy continuing only for life. There were no land titles and no heritage. The natives lived in villages; they almost never had their homes on the land they worked. In theory, if any ownership existed, it was vested in the *cacique*, or petty chief, who in turn owed feudal fealty to the rulers of his clan and nation. No individual enterprise except exploitation by the priests and *caciques* was possible, and no ambition for land ownership, for homesteads, or for self-betterment entered into Indian psychology.

The Spaniards introduced the idea of property as it was known in Europe, but the communal

system of the Aztecs gave them an opportunity, which they promptly took, of fastening a serfdom not unlike the feudal system on the natives. Great tracts of land and whole villages of Indians were distributed among the conquerors, and there grew up the anomaly of Spanish possessors of vast estates within which their Indian serfs held communal title to village lands.[1]

The Indian communes and the *haciendas*,[2] on which the Spaniards built their feudal castles, were the basic centers of the community life of colonial Mexico. The growth away from both these firm traditions was slow, and even to-day their irreconcilable differences are the root of many of the country's problems. The beginnings of the change to more modern systems were found early, however, in the appearance of a group of small private landowners known in Mexico as *rancheros*.

At first largely mestizos who tried to make their ranches into imitations of the feudal *haciendas* of their Spanish fathers, the development of the rancher type has been paralleled by the change of their little farms to more democratic holdings, wherein the rancher was himself a working farmer, his peons real "hands."

The increase in small rural properties is a significant fact in the community growth of Mexico under Diaz. It seems to indicate an approach to European ideals of national development, and indeed

[1] See part ii, chap. x, pp. 317 ff. for fuller description of the land conditions of the time.

[2] Literally, an *hacienda* is a rural property of twenty thousand acres or more; a *rancho*, a private farm of smaller size.

one of its most potent causes was the insistence of Diaz on a revision of land titles and the consequent breaking up of the communal properties in order that they might be developed by individual initiative.

The Indian mind, however, has never been truly friendly to this modern development. There was much opposition to the breaking up of communal properties, and indeed the census of 1900 reported 2,082 formally organized communes still in existence. The effective bribe of the later revolutionaries to the Indians was the promise not of farms, but of the restoration of communal properties, and undoubtedly there was a large increase in their number under Carranza—and a probable decrease in the number of the small individual properties which, under Diaz, marked the slow advance of modern community organization.

This fact of Indian conservatism and reversion, demonstrated so clearly in the actual organization of land distribution, is of deep importance to an understanding of the nature of Mexican community life. There is yet another index in the industrial organization of the Mexican villages. Under the Aztec plan, every village was a center of some sort of production, usually a specialty, such as pottery, baskets, hats. The artisans who made them accumulated their surplus and, when ready, themselves carried it to the market places of the towns, where they bartered for other products needed in their commune. From the very beginning there was barter of foodstuffs in the cities, but as a rule each

village was supposed to be self-supporting in this regard, and to this day the contribution of the Indian villages to the national food supply is almost nothing. Except for the farm communities around the great cities, such as Mexico, and for the *haciendas* which almost alone produce staples for the market, the country districts have practically no surplus food supply.

The village life is expressive in very concrete form of the separation in the Indian's mind of his work and his true life. He works for an employer to obtain money to spend upon his pleasures and satisfactions, and he tills his little *milpa* (a tract of land which is assigned him by the communistic village, or by his employer if he is on an *hacienda*) and raises there only enough for the needs of himself and his family. If he is bound to an *hacienda* he looks to his patron for support and living when his crops fail, but he seldom contributes anything voluntarily to the national food supply to which he looks for this charity in case of trouble. He lives in the village, preferring to walk a long distance to his work, and in the village life obtains such satisfactions as his simple nature craves.

This village life of the rural Mexican might be compared with the farm villages of England and of France, but the farming villages of Europe are the result of a system of intensive land cultivation which makes communication between the farms or garden plots and the village very easy, while in Mexico, under the system of extensive cultivation, the Indian may have to go a long distance each day

to and from his work. He lives in the village, not for economic reasons, but from his own personal preference, despite the tremendous loss of efficiency which this way of living entails. He may go to the mines, he may work on the railways, he may take employment in the little mills in his neighborhood, but he continues to live in villages. If the village commons or little farms about can support him, well and good, but if not the aid of a paternal government must be invoked and the economic organization necessary for industrial development must arrive at the hands of political adaptation.

Wrapped around with this conservatism, this mass of tradition upon which the Indian habitually acts and which has been the same for probably 2,000 years, the community life of Mexico is an unchanging background. The life of the farm villages of 1,000 people approximates the life of the City of Mexico with its 500,000. Half an hour's walk from the cathedral in Mexico City will bring one to a section of the capital where life follows the same régime as will be found in the most typical Indian village in the wilds of Chiapas. In the little patio which is surrounded by fifty dirty rooms in each of which a family of five to a dozen people lives, one will find women patting *tortillas*, grandmothers weaving blankets, children cutting their teeth on sugar cane, men weaving baskets and making sandals, just as one will find them at Pichucalco, a thousand miles to the south.

The life of the cities has its Spanish phases, but it is impossible to ignore the Indian influence in the

life of all and particularly the smaller units of the great Mexican community. The business of the *hacienda* has largely to do with the petty problems of its Indian retainers, and the human element is many times more exacting there than in more modern lands. The cities, for all their many European aspects, are almost dominated by the desires and standards of the Indian, a fact that tourists—or old residents—realize best. Only in the larger phases of government do the white and mestizo codes take prominence.

There are, indeed, these two codes. The European white brought with him aristocracy and the responsibilities of aristocracy; the mestizo has turned these to bureaucracy and demagogy. The first revolution, as we have seen, was carried to success by the creoles, who sought first to bring Ferdinand VII, whom Napoleon had dethroned in Spain, to rule a new kingdom in Mexico, then to set up a creole emperor, Iturbide, and, a generation later, to bring Maximilian to a Mexican throne. The mestizo ideal was noisy "democracy" and was expressed in a lively imitation of the political codes of the American and French revolutions. Finally, after bitter struggles in which the conservative element sought to create at least a centralized republic, like that of France, the mestizo imitators of the American revolutionists finally imposed an imitation of the American Constitution, carving out states where none existed, and setting up a sham democracy which has been struggling between the bureaucrats and the demagogues through the eighty

years which have followed. Mexico's eight hundred revolutions and her nearly ninety Presidents make the discussion of her political evolution a subject more related to history than to community life, for in Mexico politics is revolution and has been so since the beginning of her national history. There are no elections, and indeed never have been, the forms through which the government goes being intended not even for the deception of the public, but rather as blinds to screen succeeding dictatorships from the eyes of a democratic world.

The government problem of Mexico has seldom got beyond the primary question of public order, for only under the white régimes of the colonial period and of Porfirio Diaz has even this been attained. Of the one hundred and ten years of Mexican independence only twenty can be called completely orderly, and those were of course the period of Diaz's most complete control. Taking the question of Mexico's government from this angle, her whole history resolves itself into a series of abortive failures, lightened only by the successes of the viceroys and the brilliant era of Diaz.

In the maintenance of order the Indian has until now been a docile tool, willing (and as anxious as his mentality allows him to be) to lend himself to the works of peace, waiting for wise rulers to build him into the fabric of Mexican nationality. The whites have, as a rule, been of the landowning class, which is always conservative, so that the restless mestizos have been the great disturbing element, the great problem of government from the simple

angle of the preservation of public order up to the more subtle questions of national development. Their refusal to lend themselves for long to the maintenance of any ordered government has ever been the destructive element in Mexican history, the chief deterrent in its path along the ways of peace toward the higher development of the nation.

With the Indians as the inert element, it becomes evident that from the Spaniards to the fall of Diaz government in Mexico was not a problem that extended below the middle class. The Indian, the blind follower of leaders, was the weapon of all her revolutions, but he did not really become a political problem until the tide of Indian resurgence was stirred up and encouraged to the danger point after Madero. Where public office, graft, and loot appear on the horizon of a man's social possibilities, there begins the problem of government in Mexico. It is upon that plane that government exists as this is written (1920), and there it seems likely to remain until again the white code which ruled in the days of the viceroys and in the time of Diaz is again called back to control.

Both the Constitution of 1857 under which Diaz ruled, and that of 1917, which was the tool of Carranza, are the product of the mestizo politicians. Diaz maintained his control by ignoring many of the provisions of the instrument which gave him power, and Carranza was no more respectful to the 1917 Constitution, which he allowed to be used for the spoliation of the country and the enrichment of his generals.

Under both documents Mexico was provided with a theoretically representative, elective government. Under both, however, the President was able to arrange to succeed himself despite antire-election clauses; he has been able to dictate the individual make-up of both Houses of Congress, and to appoint, often without the cloak of elections, the governors of all the states. These in turn named the *jefes politicos* (under Diaz the executives of *cantones* comparable to American counties), and selected mayors, chiefs of police, and even the most minor officials. Under both, moreover, the courts have been completely subject to executive domination.

This is the political organization of Mexico in its simplicity. Even in actuality it was little more complicated under Diaz, whose famous motto, "Little politics and much government," hung high before the eyes of every Mexican official.

The government of Mexican municipalities, be they Indian villages or properly constituted urban towns, is vested in a municipal president and a council with largely advisory powers. This municipal organization controls the police and sanitary functions of the government and draws its authority from the chief of the *canton*, or county. He in turn is answerable to the governor, and thence to the central authorities. Taxes are collected by city and state authorities, save for the Federal imposts, which are gathered in the form of a surcharge of stamps equaling a fixed percentage of the state and municipal taxes.

The state governments in Mexico are in control of the school systems and to a large extent of the broader policies in local affairs. Local self-government is largely a name, and yet the basic communistic idea persists in the regulation of social life through the municipalities and villages. The municipality, for instance, has charge of the music in the band stands, of the amusements which come to the one official theater, and of the streets, plazas, and market places where the people live. It is to this, perhaps, that the town spirit can be traced, for the town spirit of Mexico is a very real thing. In sections where the Indian system still endures and where the common lands have persisted, village spirit runs high, and there is always a boundary dispute with some neighboring village to keep the local patriotism fanned to flame. The *tierra,* or home land, is the one spot dear above all others to the Mexican, and particularly to the Indian. He will travel all over Mexico and even to distant countries, but he will return sometime, if he lives, to his *tierra.*

In its provincial Indianism, the Mexican community owes its nature very largely to the historic lack of good communication. The Aztecs had no beasts of burden, and human backs were the only carriers, so that, although Montezuma's civilization was far advanced in many ways, it had not yet reached the point of building adequate roads between its cities. The Spaniards, who introduced horses and burros, also devoted much effort to the building of certain great highways across the coun-

try, notably the stone-paved causeway leading up from the hot country at Vera Cruz to Mexico City on the plateau. They also built this road westward to Acapulco and Manzanillo, where the galleons from Manila brought the treasures of the Orient for transport overland and reshipment to Spain. But these roads to the westward were never comparable with the great highway which was built to Vera Cruz. Some roads were extended northward and southward from the capital, but as a rule only footpaths marked the ways over which friars and explorers pushed the edges of civilization.

After the revolution, the Mexicans neglected even the upkeep of the Spanish highways, and in the middle of the last century, when the question of railways began to be discussed, Mexican roads were a byword. Pack trains of burros and mules continued to be the chief means of transportation, and the more economical ox carts and mule-drawn vehicles could hardly penetrate beyond the immediate environs of the towns.

The era of railway building had a tremendous influence in linking the outlying districts to the national capital, as well as in developing the resources of the country. Much of the provincialism gradually disappeared, and where previously the creoles and the upper-class mestizos had lived, in the interior cities and on their *haciendas*, an extremely narrow life, they were now able to keep in touch with the capital and with the world outside. The Indians and the peons also began to feel the change of outside contact, and they, too, began to develop

a realization of national unity and interdependence which was unknown in earlier days.

Meanwhile, however, the roads between villages and even those joining villages to the centers of population, have progressed but little. Climate here takes toll, for when a good road is built, the succeeding rainy season is almost sure to wash it away or to cut it into deep gullies. The typical Mexican road, even where it was once laid out for wheel traffic, is a broad space cut by ditches, over which the trains of mules, going single file, work back and forth to find the easiest trail. Around some of the cities there are automobile roads which were maintained during the Diaz time at considerable expense, but which have now fallen into disrepair and are so cut up in certain sections that even light motor cars seldom leave the cities except on vitally important trips.

The homogeneity of Mexico, despite the business and social handicaps of poor communications, is a continual surprise, but the Spaniards, and even the adventurous mestizos who went into the interior, retained something vital which contributed, even in their isolation, to the development of an essentially Mexican type throughout the entire colony and nation. With the building of the railroads the results of intercommunication, both in the shifting of the population and in the distribution of national ideas, were remarkable and encouraging. It has shifted the population considerably throughout all of Mexico, and has to a certain extent broken up the idea of *tierra*, or home land, and had a definite,

if somewhat limited, effect on the growth of the idea of *patria*, or fatherland.

That this development had not gone so far as could have been hoped was demonstrated, however, in the last few years of the revolution. Each outbreak, that of Madero in Chihuahua, of Carranza in Coahuila, of Obregon in Sonora, began in a single state and spread by state groups throughout the country, until it finally engulfed the central government. The inability of a Federal army to cover the country, owing to the still inadequate transportation facilities and the lack of good roads beyond the railways, has had much to do with the ease with which revolution spreads. An army of 200,000 men would not be too great to police Mexico at any time of unrest, and such an army has never been available. Had the communications been adequate, a much smaller force might have kept the country united under any government at any time. The success of the Diaz régime was attained in spite of the tremendous handicap of the lack of transportation, and was the result almost alone of the organizing genius of the dictator.

The police system of Mexico had reached a certain efficiency under Diaz, whose small army was occupied largely in garrison service and parade, and little with police duty. Under Carranza, however, the presence of soldiers at some time or other in every section of Mexico has somewhat lowered the prestige of the local police, although in organization the police force has remained intact in most of the cities. In Mexico City the police

have a sort of military organization and have always been headed by an army officer; similar arrangements prevail in other large cities, though the police force is supposedly under the control of the mayor or municipal president, who is answerable for its efficiency to the civil officials above him. Under Diaz there were, in addition, state constabularies in some sections, and over all Mexico the remarkable body of Federal police known as the *rurales*. These, while controlled by the central government, were essentially peace officers, and in exercising their functions worked in conjunction with the local police authorities wherever such existed, and turned their prisoners over to the state courts except where their offenses were against the Federal government. The abolition of the *rurales* by the revolution has left the police work outside of the cities and incorporated villages entirely in the hands of the army, either the Federal soldiers or the state military constabulary, an arrangement marked by graft and inefficiency.

The sanitation of Mexican communities, their water supply,[1] and in general the inspection and maintenance of civilized standards of living, are all functions of government in Mexico, fulfilled to a degree proportionate almost directly to the standard maintained by the central government. Indeed, it is to the efficiency of the police function more than to any other single factor that the relative improvement in living conditions under Diaz

[1] Sanitation and water supply are discussed in part ii, chap. ix. Crime and charities are discussed in part ii, chap. xii.

is to be traced; and, inversely, in the inefficiency of the police organization under the revolutions are to be found the chief causes of the laxity and consequent suffering in these periods. The majority of Mexicans find little use for the foibles of modern civilization unless forced upon them by their rulers.

The improvement of the water supply in Mexican towns has made it possible for some attempt to be made at modern fire fighting. Under the old systems the municipalities made practically no provision for combating fires and even in some of the largest towns there were not even volunteer departments, this function being left to the police and the crowd. Up to ten years ago the fire apparatus of Mexico City was operated by hand, but the capital and some other of the chief centers now have modern fire apparatus more or less adapted to the needs of the community. In this connection it must be remembered that there are very few buildings over two stories high except in Mexico City, and of course excepting the churches, which are built almost entirely of masonry.

While the streets in all the large cities are lighted by electricity, there is very little official street cleaning, although the business thoroughfares of the leading cities are brushed up irregularly by a small force using rush brooms and making some attempt at the disposal of the refuse. In some places there is city garbage collection, but as a rule the garbage is burned by the housekeeper. There is comparatively little use of fuel for heating, and

cooking is usually done with charcoal, so that there is little need of ash removal. Residents or property owners in Mexican cities are required to keep the streets fronting on their property cleaned, and in Mexico City, for instance, the resident in the abutting property is required to sweep and sprinkle the streets, the latter twice a day during the dry season. The policeman on patrol sees to the enforcement of this regulation.

As a general rule the Mexican community is a reflection of the attitude of the Mexican toward life in general. It seems to function successfully only under eternal vigilance—one reason why the Federal government has usually been so much more successful in the capital and in the territories than have the local governments in the states. The Mexican has a wholesome respect for authority, bred in him from the long years of Spanish rule, and generally he is told what is expected of him, and, if conscious of the proximity of a policeman, will obey regulations religiously.

The education of the masses to a desire for civic virtues has always been difficult, because, as a rule, the peon has no consciousness of his own responsibility in the creation or destruction of the things that make his town or village admirable. The detached attitude of the Indian and even of the better-class Mexican toward the beautiful public buildings of Mexico City and toward the festivals which are organized for his entertainment, cannot but impress even the most casual observer. The Mexican looks to something outside himself to provide the things

which are desirable, and has never yet been educated to a realization that he himself has any real part in their creation. The problem of the Mexican community is in the ultimate a problem of Mexican education just as completely as the problem of the increase in his wants and the improvement in his living conditions resolves itself in the end into the need for the creation of a definite appreciation for them in his own mind.

III

RELIGION

IN the centuries-long assault upon the embattled walls of Indian race and tradition, the Spaniards were uniformly successful in only one field—that of religion. Government there was, but in government we have watched the disintegrating forces of mestizo and Indian crudities coming more and more to the surface. Racial amalgamation there was, but again to-day shows us the steady disappearance of white blood, as of white rule. In intellectual control, be it culture in its broadest sense or in education, we see a struggle that still continues, with Indian apathy still triumphant in the nation's colossal illiteracy.

But in religion the Cross is supreme, supported alike by the faith of white or mestizo Catholic and Protestant and by the superstition and inbred tradition of the Indian. The whiter Mexicans may be Christian only in name (or only in fact and not in name), the Indian may be consistently pagan in his religious processes; but, white or red, it is Christianity and the saints of the Church which fill the human soul-needs of Mexico and furnish all the terms and languages of native faith. For the

RELIGION

Mexicans are deeply and inherently religious, and from the very beginning the Roman Catholic Church bent itself to meet the native conditions, and thus to conquer them, and in later days Catholic and Protestant have fastened upon the country the moral standards which, whatever their failures, are essentially Christian.

It was no mean thing to uproot the millenniums of ancient Mexican paganism in three brief centuries of Christian domination, and in the final analysis the formal and largely actual Christianization of Mexico is a work of vast credit to the militant missionary work of Rome. Whatever else may be said of the Catholic Church in Mexico, neither its responsibility for building a Christian basis there nor the completeness of its control can be questioned. Beginning with the 6,000,000 baptisms in the sixteen years immediately following the conquest (however many may have been the duplications of the rite) and continuing to this day, when virtually every infant born in Mexico is baptized by a priest, there has been no time, even in the height of the political warfare which waged around the Church, when the overwhelming majority of Mexicans have not been baptized Catholics.

According to the Mexican census of 1910, almost the entire religious population of 15,115,343 is accounted for as Catholic, only 82,167 professing other creeds, as follows: 15,033,176 Catholics, 68,839 Protestants, 630 Greek Catholics, 12,698 of non-Christian faiths, 20,015 "unknown," and 25,011 with "no religious belief."

The data of the Catholic Church should of course give the basic figures. Even this, however, is incomplete and inaccurate. The Catholic Directory[1] gives data by dioceses, and shows a total of Mexican "Catholic population" of 13,694,507, most of the diocesan populations being given in round thousands, and others showing astonishing variations, due perhaps to typographical errors, between the various years.

The Catholic Church in Mexico is divided into eight provinces, with eight archdioceses, twenty-two dioceses, and the vicarate apostolic of Lower California. The census of 1910 reports 4,405 "Catholic priests," the Catholic Directory showing 4,177 secular priests, 761 priests of religious orders, and 357 brothers, the priesthood for two small dioceses (Colima and Tabasco) being missing, and the number of priests belonging to religious orders probably being inaccurate, especially in those dioceses where the Reform Laws, which prohibit many of the orders, are rigidly enforced. Only 1,881 sisters and nuns and twelve additional "sisterhoods" whose membership is not given are reported in the Directory, the maintenance of religious orders for women, except for a very limited number, being illegal in Mexico.

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[1] Mons. Francis J. Kelley, head of the Catholic Church Extension Society and the chief American authority on Mexican Catholicism, takes this as the most reliable data obtainable, either in Mexico or the United States. In arriving at the figures given, both the 1910 and 1919 Directories had to be used, as the former, which was for the census year which we are using, did not have data for all the dioceses.

Twenty-nine seminaries for education for priesthood are noted in the Catholic Directory, but the number of schools and colleges is inaccurate, as some diocesan reports merely stated that "each parish has parochial schools" and many mentioned none. On this point there are no exact figures obtainable anywhere, owing to the combination of Mexican official inaccuracies and the fact that the Catholic Church is chary in its announcements, as its schools have always been a point of attack, though a Mexican government brochure published in 1901 said there were 32,000. There are certainly several thousand schools, caring, it is said, for more than 300,000 pupils.[1]

The Catholic Directory lists 9,325 churches and chapels, the number, of course, including many places where services are held only occasionally, and many dioceses give only round numbers. The incomplete records of the various dioceses published by the same authority list 190 asylums, hospitals, and other charitable institutions, probably far below the actual numbers.

Of these figures the most interesting are those for the number of priests in Mexico, which is at the rate of one for every 3,000 Catholics. In 1810, the period of greatest Church control in Mexico, there were 7,341 priests (of whom 3,112 belonged to the

[1] Testimony of Monsignor Kelley before the United States Senate Sub-Committee Investigating Mexican Affairs, p. 2680 of the hearings, May 1, 1920, the Catholic Directory of 1919 giving the number of schools in the archdiocese of Mexico as 232, and attendance, 50,000.

orders devoted to teaching and charity) and 2,098 sisters, most of them teachers, the total population in that year, all officially Catholic, being 6,122,354, so that the proportion of Catholic clergy

DISTRIBUTION AND SIZE OF CATHOLIC CHURCH ORGANIZATION

Diocese	Secular Priests	Priests of Religious Orders	Sisters	Catholic Schools	Seminaries	Charitable Institutions	Churches and Chapels	Catholic Population
Arch. of Mexico	620	218	1,497	232	1	100	1,000	1,839,250
Chilapa	94	...	....	...	1	...	....	361,239
Cuernavaca	46	...	....	10	1	1	300	150,000
Tulancingo	120	15	42	18	1	4	428	250,000
Vera Cruz	138	38	....	13	1	6	300	800,000
Lower California	6	...	....	1	..	...	25	43,104
Arch. of Puebla	400	200	....	300	..	...	2,000	1,200,000
Arch. of Michoacan	320	80	....	130	2	8	350	1,000,000
Queretaro	92	20	....	11	..	1	210	279,414
Leon	243	39	....	97	1	...	503	800,000
Zamora	225		....	156	1	10	158	325,000
Arch. of Guadalajara	650	55	....	All Parishes	4	23	800	1,200,000
Aguas Calientes	60	5	....	30	1	2	100	200,000
Colima	...	...	....	...	..	...	....	72,500
Tepic	98	...	....	...	1	1	65	180,000
Zacatecas	129	30	100	53	2	4	281	525,000
Arch. of Oaxaca	206	...	6 sisterhoods	68	2	4	999	920,000
Chiapas	62	...	5 sisterhoods	...	1	...	500	270,000
Tehuantepec	33	...	....	31		...	180	174,000
Arch. of Yucatan	94	17	90	37	1	...	300	300,000
Campeche	16	...	10	3	..	...	40	80,000
Tabasco	...	...	....	2	1	...	....	100,000
Arch. of Durango	111	3	1 sisterhood	12	1	2	250	350,000
Chihuahua	32	11		...	1	3	64	240,000
Sinaloa	40	...	....	20	1	5	70	250,000
Sonora	40	...	....	4	..	...	54	130,000
Arch. of Linares	80	...	....	14	1	4	75	357,000
San Luis Potosi	132	8	45	All Parishes	1	1	150	620,000
Saltillo	40	22	97		1	11	41	163,000
Tamaulipas	50	...	....	...	1	...	82	315,000
Total	4,177	761	1,881 and 12 sisterhoods	1,242	29	190	9,325	13,694,507

to the population was at that time one to 834. In the United States, with a Catholic population in 1917 of 15,742,262, there are 20,287 priests, or one to every 776 Catholics. The 42,044,374 church members of all denominations in the United States (1917) are served by 191,722 clergymen of all denominations, or one to every 153 church members.[1]

The list on the preceding page, of the Mexican dioceses, with the data from the 1910 and 1919 Catholic Directories, correlated and combined, gives some idea of the distribution and size of the Church organization in Mexico.

The data on the churches and missions of the Protestant churches in Mexico are available in more detail. In 1910 there were 19 American, Canadian, and British societies maintaining missionary organizations in Mexico, with 87 ordained missionaries, 12 physicians, 30 lay missionaries and physicians, and 167 women missionary workers, a total of 294 foreigners (including 6 British), and 130 ordained Mexican missionaries. There were 331 church organizations and 25,046 baptized Protestant Mexicans, the total number of "adherents" of the Protestant churches, baptized and unbaptized, of all ages, being 92,156.

The following table gives the details of these missionary organizations:[2]

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[1] Mexican data from Navarro y Noriega; American from United States Bureau of the Census. Both quoted by Monsignor Kelley, *loc. cit.* p. 2671.

[2] *World Atlas of Foreign Missions* (New York, 1911).

Societies	Year of First Work	Ordained Missionaries	Physicians	Lay Missionaries not Physicians (Men)	Women not Physicians	Total of Foreign Missionaries	Ordained Natives	Unordained Natives	Principal Stations	Substations	Church Organizations	Total Communicants	Total Adherents All Ages	Sunday-school Teachers and Pupils
American and Canadian Societies														
American Baptist Home Mission Society	1870	4	1	..	4	9	13	14	4	28	22	1,202	4,808	1,375
American Bible Society	1878	..	..	..	1	1	..	40	1	12	..	..	..	..
American Board of Commissioners for For. Miss.	1872	5	..	..	10	15	6	23	4	53	24	1,540	5,965	1,557
American Friends' Board of Foreign Missions	1871	3	..	2	10	15	6	23	3	8	6	670	1,090	627
Board of For. Miss., Methodost Episcopal Church	1873	11	1	..	20	31	26	204	6	46	58	5,651	17,461	3,668
Board of For. Miss., Presbyterian Church in U.S.A.	1872	9	..	..	16	26	..	..	9	222	50	5,014	20,056	335
Board of Home Miss., Methodist Episcopal Church	..	1	..	..	..	1	..	..	..	..	..	..	12	42
Board of Miss., Methodist Episcopal Church, South	1873	18	1	..	36	55	45	..	8	..	108	6,815	27,260	5,621
Christian Woman's Board of Missions	1895	4	..	..	2	6	..	16	3	21	11	596	2,384	..
Dom. and For. Miss. Soc., Protestant Episcopal Ch	1904	10	..	12	17	39	12	25	8	44	..	1,052	4,208	250
Exec. Com. of For. Miss., Presbyterian Ch. (South)	1874	3	..	..	6	9	5	11	4	21	10	721	2,884	404
For. Dept., International Committee, Y. M. C. A.	1902	..	..	..	6	14	..	2	3	..	..	..	..	..
For. Miss. Board, Southern Baptist Convention	1880	12	2	..	16	28	17	21	10	63	40	1,428	5,712	1,046
Gen. Miss. Board, Pentecostal Church, Nazarene	1906	4	1	..	7	12	..	..	4	..	..	..	..	..
Hephzibah Faith Missionary Association	1908	1	..	..	1	2	..	..	1	..	..	..	..	..
Peniel Missionary Society	1906	..	..	2	1	3	..	15	..	..	2	70	280	143
Seventh-Day Adventist Mission Board	1893	2	6	..	1	9	..	..	..	2	..	..	..	..
Woman's American Baptist Home Mission Society	1885	..	..	..	3	3	..	5	3	2	..	..	..	..
Totals, 18 American and Canadian societies	....	87	10	26	165	288	130	399	72	520	331	24,771	92,156	15,068
British Society														
Christian Missions in Many Lands	1890	..	..	4	2	6	..	..	3	..	..	..	..	..
Grand Totals, 19 societies	....	87	12	30	167	294	130	399	75	520	331	24,771	92,156	15,068

The number of members of the Orthodox Greek Church was 630 in 1910, and of the 12,698 adherents of non-Christian religions the official classification specified the following: Mohammedans, 602, Buddhists, 6,237, Jews, 254, and others, 5,605.

The "free-thinkers," atheists, etc., are included in those of "no religious belief," the census numbering them at 25,011, though the total is probably much higher, including most of the 20,015 of "unknown" faith. Mexico has since Juarez been theoretically a country without religion, and the name of Deity is carefully omitted from all public documents. This had become something of a fetish under Diaz, and it is said that the dictator never pronounced the word "God" in any public place, and when Elihu Root visited Mexico officially as Secretary of State of the United States his allusion to the bounty of Deity in a speech before the Mexican Congress was the subject of comment. This atheistic spirit manifested itself with great violence during the Carranza revolution, the story of whose persecutions of priests and nuns, coupled with the pillaging of the churches and the unmentionable desecrations of holy relics, vestments, etc., is one of the ugliest pages of Mexican history.[1] During this period of outrages (1914–16) against the Catholics, the Protestant missions were left almost untouched and were, on the other hand,

[1] Cf. Theodore Roosevelt, *Fear God and Take Your Own Part*, p. 231, ff. (New York, 1916), and Francis J. Kelley, *The Book of the Red and Yellow* (Chicago, 1916).

specifically encouraged by Carranza, as they had been under Diaz.

This brings us to the much-discussed question of the nature of the religious population of Mexico. The Protestant missionary bodies have long justified their work on the ground that, although ostensibly Christian, the majority of the Catholics of the country are in reality little better than pagan, owing to the domination of forms and rituals and to the superstitions with which the churchly ceremony is interpreted by the Indians. There are not lacking in Mexico native critics of the Church who say much the same thing. One of these[1] divides the Church population into three divisions, which he calls Pagan Catholics, Utilitarian Catholics, and True Catholics. All are baptized, married (if at all), and buried by the Church, but the Pagan Catholics perform all sorts of strange rites and find their chief bond to the Church in this satisfaction of their superstitions. While they profess full faith in Christianity, they also perform rituals for the preservation of their crops from drought and wild animals; they exorcise demons during illness and find their sweetest revenge against their enemies in the use of charms and philters. This commentator points out what Protestant missionaries have also claimed, that images of the saints in Mexican churches are worshiped with much the same devotion as would be given idols, and that the religious festivals are often marked by pagan dances and exotic ceremonies on the part of the Indians. The Pagan

[1] Maniel Gamio, *Forjando Patria*, p. 157.

Catholics are indeed mostly Indian, and it may be that the approximation of many of the special Mexican saints to the Aztec gods has had much to do with the exceeding importance given to these saints in Mexican religion. Our Lady of the Rains, much esteemed by the simple natives of the farming communities, seems undoubtedly related to the important Aztec Goddess of Water, and her miracles are said to approximate those attributed to the ancient deity. Many of the important shrines of the Mexican Church are in spots formerly sacred to Aztec gods and that of the patron saint of Mexico, the Virgin of Guadalupe, is said to have once been a holy place of an Aztec goddess. In fairness to the Catholic Church, however, it must be said that the Indians are not allowed to dwell on these alleged correspondences, and many of the miracles attributed to the Virgin of Guadalupe are absolutely authenticated, and recognized by the Vatican. The Church has always been lenient with native superstitions, and each year at the Church of St. Anthony the Abbot, in the heart of one of the poorer sections of Mexico City, a priest blesses a motley crowd of burros and horses, cows and goats, pet dogs, cats and parrots, while in some of the country churches the priests go so far as to bless sackfuls of ants, worms, etc., so that these pests, having become "Christians," may mix with their fellows in the fields and induce them to leave the afflicted farmer in peace.[1]

[1] This last is upon the authority of a former Spanish priest, now a Protestant. Interview No. 433, Doheny Foundation Files.

The number of these so-called Pagan Catholics is undoubtedly very great, but so is the number of true, deeply religious Catholics, and also of those who profess the prevailing religion because of the social pressure upon them—the so-called Utilitarian Catholics.

It is obvious that many of the factors which determine the nature of the religious population, genuine and "utilitarian" as well as "pagan," antedate Catholicism. The Aztec empire was a complete theocracy, wherein the priests ruled not only in religion and morals, but in government and in war. The priesthood dictated the policies toward other tribes, and their demand for human sacrifices was one of the chief causes of the devastating wars which marked Mexican history previous to the conquest. An infinitude of gods, a vast number of temples, and a priesthood which included most of the ruling class in one form or another were its chief characteristics.

The Spaniards who overthrew them were what would be called to-day fanatically religious. Only a few generations earlier Spain had won the last of the wars which had been waged for centuries against the Moslems, and religious fervor ran high in the Spanish court. With Cortez came priests, and in the first ships which followed him came friars and the Jesuits. Conversion of the Indians of Mexico was one of the chief objects of the conquest, and the mission priest and the explorer in search of gold went side by side into the distant wilderness. The "conversion" of the Indians was wholesale and

incomplete at the beginning, but during the centuries that followed a more thorough inculcation of Christian doctrine went on. This was found not only in the populous centers, but also in the vast outlying sections where the friars established the missions.

These wonderful centers of religious proselytizing, civilizing industry, and political control were established not only along all the frontier from Saint Augustine, Florida, to San Francisco, California (where their remains still delight lovers of romance and beauty), but throughout the interior of what is still Mexico. A true and beautiful religious zeal animated the friars and later the mission priests, and history holds no record of devotion, self-sacrifice, or martyrdom that cannot be duplicated in the stories of these great missionaries.

The history of the missions is epitomic of the whole attitude of the colonial Church toward the natives, an attitude which has marked the life and psychology of the Indian so deeply that neither subsequent abuses nor broken faiths nor anti-Church revolutions and propaganda have been able to eradicate its influence. Throughout the interior of Mexico, and extending far into the American Southwest, the friars, with but one or two soldiers for guards and messengers, gathered the Indians into villages about the missions, and through wearing years impressed upon them a religious and civic discipline which extended to the most intimate details of their private, industrial, and community life.

The missions, dramatic as their story is, were but a part of the work of the colonial Church. From the very beginning, it was only the priests and nuns who were willing to devote themselves to the education of the Indians, and to them alone (for hardly anyone else has ever touched the problem) is due most of such civilization as has been gained and such implantation of Christianity as they have even to-day. Moreover, all the schools of the colonial period, including the great colleges and asylums which still exist, were largely church foundations, and not least of all is the vast material monument of 9,000 churches, virtually all of which were built in the colonial days.

Much criticism there is and much is deserved, but no other people and no other cult has so transformed and beautified a land as the Spaniards and their Church transformed and beautified Mexico in the three centuries which ended in 1823. Spain gave Mexico a government and a language; the Church gave her religion, morals, and such art as now exists. Much might have been done that has not been done, and a field so vast and so sordid that it sickens the observer awaits correction and development. The Church alone dared face the problem for many centuries. On the broad shoulders of Diaz it rested like a cross; through Mexico's periods of revolution and distress and struggles for personal aggrandizement it has lain inert and sodden upon all her governments. Here and there a corner has been lifted by a Protestant missionary, by a handful of self-sacrificing educators, or by a

puny idealist like Madero, but taken all in all only the Roman Church has sought to lift the whole mass, or has so far achieved any broad success in moral and perhaps even in educational uplift.

During the colonial period there was almost no distinction between Church and state in the affairs of government. The crown enjoyed all the revenues which the Church collected in Mexico, the Holy See's only requirement being that the missionary work and worship be maintained, churches built, convents and schools established. The bishops were practically chosen by the king of Spain, and in reality the Church was part of the colonial administration, paying its returns after the maintenance of its functions to the government in Madrid, a princely gift from the Holy See to the throne of Spain. In this arrangement, however, were the roots of the troubles which later grew out of the relationship of the Church and state in Mexico. These troubles had two phases, one the wealth which the Church kept in Mexico, the other the question which the independence of Mexico brought to the fore, whether the rich ecclesiastical revenues belonged to the Church or to the new government. Both these issues brought the Church into politics, the first because the power which this wealth gave the Church over the ruling, landowning class tempted the clergy to meddle in government affairs, and the second because it made Church control one of the burning questions of political readjustment during the early revolutions.

The wealth of the Church was the first element to

cause trouble, and that began before the independence. From the earliest times, the Church in Mexico had been almost the only banker of the country and lent vast sums to the landowners on generous terms at an interest rate of 5 per cent—one excellent way of keeping from paying unnecessarily large amounts to the king (another way being the building of noble churches and great institutions). In 1804 Charles IV of Spain, looking about for ready cash, ordered the Mexican Church to collect and pay the crown, forthwith, the P44,500,000 which it had loaned to the landowners, an order which could not be obeyed and which was later revoked, though P10,000,000[1] of the "Pious fund" was taken. But the fear of the ruin of their farms and the country had stirred the creoles against Spain, and to this royal edict may be traced not a little of the ultimate willingness of the native white aristocracy definitely to throw off Spanish rule. But in that order there lurked yet other difficulties, tied up with the fiscal question of the Church's revenues after the revolution.

After independence from Spain was finally accomplished the country was cleaved on the question of the division of the spoils. The Conservatives (mostly creoles) were the champions of the Church and indeed the chief beneficiaries of its favors, and the Church now claimed as its right the capital

[1] The Mexican peso will be designated by P. Previous to the demonitization of silver in the United States the $ and P were of equal value. The peso is now of gold value, equivalent to fifty cents, or two shillings.

and all the surplus revenues which it had formerly given to the Spanish king. The Liberals (the majority of whom were mestizos) held that the new government, as the inheritor of all the other perquisites of the Spanish crown in Mexico, should also enjoy the surplus revenues of the Church. The issue was clear cut and the Church entered definitely into politics.

As early as 1833 the question of the government taking over the wealth of the Church, first officially suggested by Charles IV in 1804, was brought up again, the proposal being for the nation, assuming the support of religion, to take over the Church lands and subdivide them into small properties which should be sold on long terms with 5 per cent interest, the returns to be used to pay the public debt and "maintain worship in a manner more adequate to the needs of the people."[1] This was linked with other anticlerical plans, and was opposed by the clergy and the Conservatives, and the government of Gomez Farias, which had proposed it, was overthrown.

The issue of Church property was kept alive, however, and the Church revenues were reduced by forced loans and heavy taxes. In 1856 the remaining capital of the Pious or charitable fund was taken on the pretext of putting it into circulation, and by succeeding laws from 1859 to 1861 all the Church's property was finally wrested from it and sold. But there was none of the division of the

[1] José Maria Luis Mora, *Obras Sueltas I*, quoted by T. Esquivel Obregon, *op. cit.*, p. 161.

land or the maintenance of the old loan system which had been proposed in the plan of Gomez Farias; on the contrary, the Church loans were immediately called in, forcing great tracts on to the market and resulting in a new concentration of the land in the hands of the wealthy.

This, in essence, is the basis of the political activity of the Church in Mexico, an activity more economic than political, and least of all touching upon the religion and morals of the people. All the later appearances of the Church in politics, from the Empire of Maximilian to to-day, have their genesis in these old politico-economic difficulties, and in no sense in religious questions.

Through all its kaleidoscopic troubles, however, the Church has not been overthrown. During the earlier revolutionary period, from 1810 to 1876, the churches, convents, and monasteries were sacked much as they were sacked during the revolutions of 1910 to 1920. In 1857 the Mexican Church was stripped of its properties, the church buildings and adjoining structures being "loaned" by the government for religious purposes, but, save politically and economically, the Church was little affected. In 1917, under the Carranza régime, the church buildings themselves were actually taken and the final dissolution of the property-holding right of the Church, even by subterfuge, was apparently achieved. During the time of Diaz there had been some little return of convents and church schools, but these, under the Constitution of 1917, were again wiped out as in 1857.

There had been some apparent relaxation of the grip of Diaz on the Church, particularly in the matter of schools, but such leniency was usually balanced, as, for instance, in 1906, when the Diaz government prohibited the long-accustomed open-air service in the cemeteries, a ruling that gave ample warning that there was no real loosening of the government domination of religion.

The Carranza era in Mexico, despite its violences, had little of the firmness which characterized the age of Diaz. The recovery of the Church from its persecutions was astonishing, and could be indicative of nothing but a lack of real foundation in public approval of the anti-Church features of the campaigns. In the last two years of Carranza's rule, 1918–20, the bishops and many of the priests returned to Mexico and resumed their work. Some came under sufferance from the government and some entered Mexico in disguise, and at the fall of Carranza in 1920 practically all of the churches had been reopened.

Even if the Church has not been permanently damaged, however, great harm has been done to the moral tone of Mexican life by the continued battles over religion. The Laws of Reform, while they had a most definite effect on the political power of the Church, also brought in a controversy which, waging to this day, has steadily undermined the morals of the people. This is the quarrel over the rite of marriage, which, previous to 1859, was solely a religious sacrament. The Laws of Reform made it a civil contract, and the Church in its po-

litical zeal carried its battle with the anticlerical forces of Mexico to the very altar of the Mexican home. By refusing to recognize the civil ceremony and by continuing to make the religious service an expense to the Indian, the forming of illicit relations became a commonplace, until it is probably true to-day that, in the lower classes at least, marriage, whether civil or religious, has practically no significance. By adopting this attitude the Church undoubtedly weakened the moral tone of its people and gained little except a cause for complaint against the government.

Another serious blow to Mexican moral standards that resulted from the Wars of Reform, and in lesser degree from the Madero-Carranza revolution, was the effect on the priesthood. During the colonial régime the policy of Spain toward the Indians (regarding them as minors) limited the clergy to whites and mestizos. The exile of the Spaniards after 1823 not only took away thousands of able Spanish priests, but it also drew many of the educated creoles and mestizos in the priesthood to vacated opportunities in the learned professions, and many, influenced by Liberal opinion, no doubt, left the Church to become lawyers, doctors, etc. The Laws of Reform closed the seminaries, and thus limited the opportunities for replacing these losses with Mexicans, and the Church was forced to depend for its hierarchy and for its best workers largely upon foreigners, from France, Italy, and later again from Spain. As a result, the Mexican priesthood has long been composed of a mass of

inadequately educated native *curas*, with a thin veneer of often disinterested foreigners and a few able Mexicans educated abroad. Moreover, in proportion to the great work to be done and indeed in proportion to the immense plant of church buildings and their appurtenances at the Church's disposal, the number of priests in the field has been astonishingly low. The twenty-nine seminaries in Mexico in 1910 were all relatively new, but were doing much both to correct the shortage of priests and to raise the low standard of the mass of the clergy.

The relatively limited number of the Catholic clergy and the low qualifications of many of the priests are, however, at once the cause of and the excuse for the Protestant missionary work in Mexico. The government encouragement which the Protestants have had from the first came from two sources, one the realization of the vastness of Mexico's need for ministry, and the other the political aspect, which undoubtedly influenced Diaz, and to a far greater extent Carranza, to welcome and to nurture this new means of control of the power of the Catholic Church. This political factor is no less distasteful to Protestants than it is to Catholics, and under Diaz the former took no part whatever even in such politics as there were. During the revolutionary period there was some appearance of change, but such support as was given to Carranza by the Protestants was individual, many being active in the armies and not a few native Protestant ministers achieving political prominence, temporarily giving up their church rank, in compliance

with the law. The foreign missionaries generally held aloof, although among the warmest defenders in the United States of the ill-starred Carranza régime were returned American missionaries from Mexico.

The object of the Protestant missions in Mexico has never been very clear to the Mexican mind, the idea of many being that the Catholic Church should have been allowed to continue its work without the definite opposition to its teachings which it is generally conceded that the Protestant missions promulgate. The contention of the Protestants, however, has always been that there is just as much reason for them to carry on their work among the Mexicans as for them to send home missionaries into the western part of the United States, and the repeated assertion that the majority of the Catholics of Mexico are still essentially pagan gives support to their attutide. There was bitter opposition, and some bloodshed, in the early periods of the missionary work, and even to this day the Protestants are sometimes regarded as emissaries of the American government looking toward the ultimate annexation of the country. The confusion of religion with politics in the Mexican mind has affected this attitude toward the Protestants very considerably, and the fact that most of the Protestant converts in Mexico supported Madero, and that Carranza, after he came to power, was extremely favorable to the Protestant churches, has apparently given new ground for this suspicion. The Protestants were undoubtedly used very

studiedly by Carranza to relieve himself as far as was convenient from the stigma of being anti-religious in his opposition to the Catholics, and the Protestant work was greatly benefited by his implied support and by the prominence he gave its adherents in the revolutionary councils. This is the chief basis for the many charges on the part of Mexicans regarding the "pernicious activities of Mexican Protestant clergymen."

The Reform in Mexico was achieved without any substitution of Protestantism for Catholicism, and it was not until 1870 that the first Protestant missionary board (the American Baptist Home Mission Society) officially began its work in Mexico. This was not the first work done by individual Protestant missionaries, however. When General Scott marched from Vera Cruz to Mexico City in 1847 his army was accompanied by an agent of the American Bible Society, who distributed several thousand copies of the Bible in Spanish between Vera Cruz and Mexico City. He retired with the army, and the only missionaries who entered Mexico before the Reform were a few travelers from Texas, among them a woman, Miss Matilda Rankin, who held services in Monterrey in the 'fifties. In 1862 a Baptist missionary did some individual work in Mexico, to be followed, eight years later, by his Church organization. Between 1870 and 1880 eight missionary organizations of the United States began the work which they have continued since.

There were in 1910 nineteen missionary organizations with stations in Mexico. The official figures

on the activities of the Protestant churches in Mexico given in the table tell only a part, of the broad work attempted and accomplished. Though the few hundred Protestant workers (one foreigner or native to each 20,000 of the population) cannot, of course, fill the gaps, they have, for more than forty years, been diligent workers in their many fields—churches and Sunday schools, hospitals and asylums. For about fifteen years they have been operating efficient schools in their chief centers and have presented a high scholastic standard both in their normal and seminary courses and in their primary schools. Although under the antireligious laws of Carranza the Protestant schools, like the Catholic, were closed, not a little of the criticism of the Mexican Protestant clergymen by anti-Carranzista Mexicans was based on the alleged domination of government education by former Protestant school-teachers who were said to have been placed in the schools by former Protestant clergymen who were influential in educational affairs under Carranza.

The evangelical work of the Protestant missionaries has been conducted on a high spiritual plane, and has often been an effective leaven in the Mexican community. Always the uncommon standard (for Mexico) of legal marriage for all "wedded" converts has been insisted upon before baptism, and conversion carries with it a full acceptance of the tenets to which the churches hold their members at home. This condition has had not a little to do with the limitation of their mem-

bership, but it has doubtless also resulted in much more thorough conversions.

Drawing their converts, as they often do, from people who are essentially religious, the Protestants have encountered two difficulties which at first may not be apparent. One is the deep resentment of the Catholics, for the most conscientious Mexican Protestants are likely to be men and women, formerly good Catholics, who, because of their very sincerity, had come to feel limitations and deficiencies in the Catholic Church. The other is the social ostracism which sometimes almost approaches spiritual martyrdom in the separation of Protestant converts from their families and friends. These conditions have made many unique problems for the missionaries, and indeed the whole work in Mexico has to be carried on on a plane different both from the work among the heathen and from home missions in the United States. To this field the missionaries have adapted themselves, and they are to-day tilling it diligently, while they continue also to develop their greater opportunities of reaching the thousands of Mexicans who have never been touched by such work as the Catholic priests have been able to do.

The present status of Protestant work in Mexico is not so much advanced beyond the place held in 1910 as it should be under the undoubted advantages it had in Mexico under Carranza. This is due, however, largely to the shrinkage in missionary funds during the period of the Great War, when effective work might have made very great gains in

Mexico had not the call of Europe and the Near East been more urgent. In organization, however, the work has been greatly facilitated by the zoning of the country and its division among the evangelical Churches. The missionary organizations formerly worked independently, and there was much concentration in such centers as Mexico City and Monterrey, while other equally fertile fields were almost neglected. The organization of the Committee on Co-operation in Latin-America has now divided the country up into sections, in each of which one or two Protestant churches work alone, only the Southern Baptists being outside this arrangement. Supplementing the committee is a Mexican National Committee on Co-operation, composed largely of native ministers and laymen, which had elaborate plans for broad national evangelical campaigns, for the publication of a religious magazine, and the ultimate establishment of a national university patterned, in a way, after Robert College in Constantinople.

IV

EDUCATION

OF the four great determinants of the conditions under which the Mexican people live—climate, government, religion, and education—the last is the most humanly vital, and at the same time the most beclouded in its basic facts and tendencies. Its relationship even to the impetus to progress, surely the most obvious of its functions, is lost in the childish anxiety of Mexican educators to appear progressive and advanced, while the long quarrels of Church and state to control the intellectual processes of the yet-to-be-awakened Indian have made education the football of politics and the door mat of revolutions.

Probably the most teachable of all the backward peoples of the world, the Mexicans are to-day almost illiterate. Hardly a tenth of the population has a common-school education and more than three quarters can neither read a street sign nor scratch their own names. Keen and active as children, easily led, accustomed in the main to logical processes of thought and surprisingly free from the prejudices even of their cousins, the North American

aborigines, the Mexicans offer a fair field wherein devoted tilling would bring forth worthy fruit. But always the eternal discussion of systems of education, the need of beautiful school buildings, and the shortage of immediate funds have absorbed more of the energy of Mexican educators than the question of increasing the number of mere school organizations and their efficiency in reaching the people. Previous to the independence, all education was in the hands of the Church and was broadly elemental, much emphasis being put on religion and manners and comparatively little, according to its critics, on the training of the mind. In the early days of the republic the schools were continued by the Church, but under the Reform Laws education became a function of the state. In 1867 the first compulsory education laws were passed, in the face of pitifully inadequate facilities for training the children who were theoretically required to attend. Even then, educational systems were always under discussion. Although for many years the *Compañia Lancasteriana*, so called after the English educator, Joseph Lancaster (1778–1838), supervised such schools as there were, a National Congress of Education in 1889 made definite recommendations which resulted in the displacement of the then antiquated Lancaster system and the separation of the state schools from Federal jurisdiction, the administrative system which is in vogue to-day.

The subject of educational systems continued controversial, however. It has been cut through

and across by the theories of the Jesuits, the theories of the Positivists, and the contentions of practical teachers and priests as opposed to the ideals of officials who apparently looked more to Mexico's appearance as a modern state and the avoidance of theological domination than to the necessity of an education which would really lift the Indian out of his lethargy and ignorance. In yet another sense Mexican education has been a battle between those who would follow conventional systems and those who would follow the more modern ideal of making education a preparation for life, between those who would give the uneducated native a smattering of learning and those who believed that this smattering would be injurious to him by bringing him only discontent, and therefore that education should uplift a few with an eye to the full intellectual development of the Mexican people of generations and even centuries ahead.

Under Madero still another ideal took hold of the Department of Education in a plan for general rudimentary education in reading, writing, and civics. This, however, was promptly abandoned under Carranza, and the chaos was made complete by the driving out of the priests and nuns who had previously maintained almost the only system of teaching in Mexico which had been based upon a persistent and definite conception, however false, of the needs of the people. For the Church schools, emphasizing probably too much the religious side, had gone on steadily through four hundred years, with a consistency which at least is a virtue in the

tangled educational experiments of the period of independence.

The opposition to education under religious control has had a fantastic effect on the Mexican curriculum, eliminating everything that smattered of theology and even of morals, and making the typical Mexican school a place where pupils are noisily taught reading, writing, and arithmetic, but where the teacher has little or no contact with the life of the children.

The question of moral education, including training in civics, ethics, and politeness, has absorbed untold educational energy. The fact that the Church held that it had the chief or only right to teach morals apparently resulted in the early elimination of ethics, and civics as well, from all the government schools. Yet the home life of the lower classes is so far below almost anything that is known in the United States or Europe, that the necessity of training the youth of the country to a conception of obligation toward the state and of the state's attitude toward him, becomes almost imperatively incumbent upon the teachers. Only the Church schools ever dared assume this duty, and even when some factions would have been willing, in late years, to have definite ethical training in the public schools in a modern way, the lack of funds and the lack of thoroughly educated teachers made this almost impossible.

How deep the cloud of ignorance and how inadequate the provisions for dispelling it, can be grasped only loosely by Mexican statistics, for here, even more than elsewhere in the fantastic maze of official

figures, one feels ever the baffling hand of mendacity, the apparent determination that no one shall ever really know the truth. Only the most progressive sections have ever given out school statistics, and we are asked to judge all Mexico by the Federal District, or Puebla, even while we are told that their relatively poor showing is the best in the entire country.

Even the appalling figures on illiteracy are unconvincing, for again estimates are at variance with statistics. In 1909 Francisco I. Madero, in his famous political handbook, *La Sucesion Presidencial en 1910,* stated that the census of 1900 showed that 84 per cent of the population could neither read nor write, while in the Federal District the illiterates were 62 per cent of the population. This is not borne out by a compilation of the census figures, however, for these show that the illiterates at that census totaled but 80 per cent. We can easily believe that Madero's estimates are the more correct, but we are again baffled by the apparent frankness of the government reports, which show only the slow gain of 2 per cent in each of the periods 1895–1900 and 1900–10. The following data were hidden in twelve unassembled columns in various Mexican census reports:

ILLITERACY IN MEXICO

Year	Total Population	Illiterates			Percentage
		Minors	Adults	Total	
1895	12,619,949	8,007,465 (*Under 12 yrs.*)	2,308,434 (*Over 12 yrs.*)	10,415,899	82
1900	13,604,923	6,826,673	4,095,319	10,921,992	80
1910	15,150,369	7,165,454	4,786,277	11,951,731	78

In a bulletin published in 1912 (under Madero's Presidency) the illiterates were classified as "of school age or above," and showed 3,615,320 "of school age" who were illiterates and 6,709,164 adult illiterates, a total of 10,324,484, presumably at the census of 1910, or approximately only 66 per cent of illiteracy in Mexicans of school age or more. There is no check against these figures, such as signers of the marriage register, the system formerly used in England, for the vast majority of the Mexicans of the illiterate classes do not marry. Some foreign companies have noted the illiteracy of their employees, one with 525 workers having only six who could sign their names, a proportion of 99 per cent of illiteracy, and it is fairly safe to assume that outside the cities the average of illiteracy is 90 per cent or higher. Even taking the census figures at their face value, the actual number of Mexicans who were technically literate in 1900 was only a little over 2,700,000 in a population of 13,604,823. When we remember that the Mexicans claimed that more than this number were pure-blooded whites, and even our revised figures[1] allow for 2,000,000 of "white culture," the appalling condition of education in Mexico begins to have a measuring stick—even if a most inadequate one.

The statistics of schools are somewhat better, but here the matter is complicated by the absence of complete data regarding schools outside the Federal District and territories, and by the lack of full registration of the Church schools. Theoret-

[1] See page 37.

ically, the Catholic schools are nonexistent, though large numbers of them functioned in every diocese in the time of Diaz, "over 30,000 parish schools," with an attendance of 300,000, being mentioned unofficially.

Official figures that allow for comparison do not begin until 1893, but in 1876, according to the Mexican legation in Washington, there were 8,176 "primary schools" with an attendance of 368,754, while in 1895 there were 10,915 "public schools" with 722,435 attending, or 5 per cent of the school population, apparently in the whole republic.[1] The following figures[2] from official reports are apparently meant to cover only the Federal District and territories:

OFFICIAL SCHOOLS

Classified According to Status

	1893	*1900*	*1906*
Federal and state	4,876	6,592	5,867
Municipal	2,957	2,872	3,114
	7,833	9,464	8,981

According to Kind of Instruction

Primary	7,616	9,363	8,877
Secondary	173	41	38
Professional	44	60	66
	7,833	9,464	8,981

[1] Matias Romero, *Mexico and the United States*, p. 150.

[2] I. J. Cox, Monograph on *Education*, Doheny Research Foundation.

Attendance and Progesss

	1893	*1900*	*1906*
Enrollment	483,337	713,394	615,134
Average attendance	346,665	490,527	.....
Number examined	313,204	443,120	.....
Number approved	242,692	367,868	325,266
Number completing course	1,667	19,820	25,945

Teaching Force and Expenditures

	1893	*1900*	*1906*
Professors	2,376	3,451	4,004
Salaries	P794,476.94	P1,465,140.70	P1,737,859
Aids and assistants	1,508	3,688	5,037
Salaries	P296,770.40	P1,236,256.74	P1,863,359
Servants	609	1,266	1,427
Salaries	P65,321	P170,254.11	P216,196
Other expenses	P953,899	P1,435,258.17	P2,310,117

UNOFFICIAL SCHOOLS

Classified According to Ownership

	1893	*1900*	*1906*
Private	1,769	2,068	1,896
Clerical	244	493	547
Association schools	116	152	119
	2,129	2,713	2,562

According to Kind of Instruction

Primary	2,088	2,653	2,536
Secondary	29	33	16
Professional	10	27	16
	2,127	2,713	2,562

Attendance and Progress

Enrollment	111,142	146,709	163,020
Average attendance	78,291	117,543	.....
Number examined	53,474	98,673	.....
Number approved	42,259	76,571	94,422
Number completing course	1,922	3,946	8,910

EDUCATION

If we take the total of official and unofficial schools for 1906 at 11,543, we have one school for every 1200 inhabitants of the country—not a bad showing, until we discover that the average enrollment in each school is but 62. This is even reduced, in actual attendance, to about 50, if we take the proportion of attendance to enrollment indicated by the more complete reports of 1893 and 1900. Tremendous things were done in Mexican education under Diaz, but such facts as the smallness of individual school organizations are the sort that are not emphasized. A government report on education in 1907 followed the usual method of ignoring the statistical facts, but stated the following to be the proportion of schools to population in the various states:

Statistics of public instruction show that the state of Jalisco has one school for every 2,354 inhabitants; Aguas Calientes, one for every 3,103; Campeche, one for every 1,236; Coahuila, one for every 2,090; Chihuahua, one for every 2,731; Durango, one for every 2,468; Guanajuato, one for every 4,596; Hidalgo, one for every 1,020; Michoacan, one for every 2,888; Morelos, one for every 687; Nuevo Leon, one for every 1,158; Puebla, one for every 886; Queretaro, one for every 1,444; San Luis Potosi, one for every 2,592; Sinaloa, one for every 1,041; Sonora, one for every 1,092; Tabasco, one for every 1,018; Tamaulipas, one for every 1,777; Tlaxcala, one for every 700; Vera Cruz, one for every 1,268; Yucatan, one for every 792; Zacatecas, one for every 1,316, and Mexico, one for every 936.

Some of the Mexican states have actually done considerable work in education, Puebla, for instance,

being in many ways as advanced as the Federal District under Diaz. In fact, genuine progress has been made not only in certain states and in the Federal District, but also, in proportion, in many isolated sections. In 1900 schools were rare even in the larger towns, while in 1910 there were at least school organizations in nearly every town and in hundreds of villages, and in President Diaz's own state of Oaxaca, for instance, there were schools of some sort, and often very fair schools, throughout its whole area.

Considering the depth of ignorance and the illiteracy, however, the expenditures for education even under Diaz seem very small. Diaz's total government budget was less than P100,000,000 a year, and the appropriation for Federal schools was about P4,000,000. This sum was to cover the education in the Federal District and in the territories, and it is probable that the money annually expended by the states on education would not anywhere approach a similar sum. Granting that it equaled it, however, the total possible appropriation for education during the Diaz régime was about P8,000,000 per year, or P4 per child of elementary-school age. Out of this, however, came as well the moneys for the higher educational institutions, upon which considerable sums were spent, for these were among the show places of Mexican progress. Under Carranza the common schools were entirely divorced from Federal control and support, and in view of the fact that the sacking of the country had left all municipalities bankrupt,

that the antireligious trend of the revolution had closed hundreds of Catholic schools, and that the budgets of Carranza had always to meet a deficit, it is certain that the real expenditure for education per-capita child of school age was far below that of the Diaz time.

In fact, the educational conditions under the Carranza régime were such as to wipe out much of the slow progress made by Diaz. The stress under which Carranza labored in his efforts to maintain his military control of the country so depleted the government funds that, as has always been the case in revolutionary Mexico (and elsewhere, indeed), the schools had to suffer. The Federal Department of Public Instruction and Fine Arts was first abolished, and the jurisdiction and support of the Federal schools was distributed, the primary and secondary being assigned to the municipalities, commercial schools to the Department of Industry and Labor, and the professional schools to the direction of the University of Mexico. The Federal government provided no money for the maintenance of the primary and secondary schools, and the municipalities had no funds, so in May, 1915, having received no pay, the teachers of the Federal District went on a strike.

The result of this strike, in which street-car employees and others joined in sympathy, was the appropriation of some funds for the payment of teachers by the Federal government, and some of the schools were reopened, but with reduced teaching force and reduced attendance. The report of a

committee assigned to the arrangements decided that 86 primary and 32 secondary schools should be retained, 36 primary and 10 secondary being closed, and the selected teachers who were kept were to receive from P3.09 to P3.56 per day, or say about P100 a month, during the school term. It is worth noting in contrast (although the figures are for the whole Federal District, including several municipalities besides that of Mexico) that the Diaz record in primary education in this section for the quiet years previous to the four years of Carranza rule showed 296 elementary schools in 1906, 338 in 1909–10, and (under Madero) 343 in 1911–12.

Beyond the facts of Mexican ignorance, beyond the utter inadequacy of the provisions to combat it, looms, as ever, that hopeless problem of the system of education. The Mexican mind must indeed be trained, but the Mexican mind that must lead the untrained brother seeks, and justly, to know the road he is to travel. The determination of that road is not the province of this book—it belongs in the sphere of the science of education, and if that science works from the facts that exist, we can well hope that the problem will be solved. Mexico has already tried most of the systems that might be looked to to guide her, and probably her chief failure has been in that she has never yet, since education was taken from the Church, been able to take a long-distance view and to work in ordered progress along a predetermined road. Under Diaz the menace of churchly control seemed too imminent, and only under Diaz has Mexican government,

since the viceroys, even begun to see its problems whole. Under Madero, the plan for rudimentary education, for all the criticisms of it, had the virtue of being a frank facing of the Mexican educational problem in its uniqueness, not a slavish copying of foreign systems. Under Carranza, the fiasco of education might be called the greatest of all the revolutionary failures, and yet that can well be explained by the fact that the exigencies of government kept funds and vision turned to very different directions.

To him who seeks simply the welfare of Mexico, the Hampton ideal, the training of leaders for tiny schools, for little towns, for the centers of groups that shall radiate idealism and education and the happiness of adjustment to life as it is, takes hold of the imagination. At Hampton Institute, at Tuskeegee, the slow work of training leaders for the negro race has been going on, passing through deep valleys of ignorance and prejudice, the creations alike of dull, sodden despair and of polished yet unfitted theorizing. Yet the long road seems to the watcher to be nearing the crest, to be promising, truly, a solution of the education of a race.

It may be that a similar system is the ultimate solution of the human Mexican problem, but it is a solution which so far Mexico has never accepted, perhaps because Mexicans dislike so much to admit that theirs is comparable in any way with the American negro problem.

Yet education for life seems the essential need of

the Mexican population. The life that they must face has tremendous problems not only in the temperament, inheritance, and habits of the people, but in the continually growing pressure from without of the higher civilization which Mexico must ultimately accept. The long list of experiments in government which make up Mexican history has been essentially a struggle to graft the white man's ideals upon a people of a lower race type, without adapting the ideals to the type or educating the type to the ideals. The result has been a veneer of peaceful government, and in education a veneer of Latin culture. Many of the men who became prominent in the Madero régime were the clear-eyed intellectuals who had been suppressed by the materialism of the latter days of Diaz, and these men brought to the surface at that time a desire to look frankly upon the Mexican people as they were and not as it would be well to have the rest of the world regard them. The result was a definite trend toward a recognition of the necessity for adaptation to the psychology and needs of the Indian.

All this seems to be a tending, unconscious as yet, perhaps, toward the Hampton ideal of education for life, the raising of the mass by the elevation of a few, and the scattering of those few far and wide throughout the land. The way is long, the need is great, and we have yet to see the beginnings. Industrial training as a system is still to come, the very education of the hands in kindergarten is practically unknown. An ignorance so profound

that it is itself an enigma deadens every effort, and yet it seems that when the day of understanding comes the leaders who are yet to find the way out of darkness will have the torch in an education to the true rewards of life which will illumine even the depths of Indian apathy.

V

THE FAMILY

CAPTIOUS critics of the social life of Mexico have been concerned that there is no word in the Spanish language for "home" and that what they call a true domestic life of the Mexican people is almost entirely absent. Nothing could be more sweepingly inaccurate, and yet this attitude is expressive of that habit of judging Mexico by Anglo-Saxon standards which makes a true understanding of her faults as well as her virtues so difficult.

Most listeners never get beyond the solemn fact that the Mexican (and the Spaniard as well) speaks of his "house," but not of his "home," yet the word *casa* (literally "house" and used commonly to signify the building), means, in the sense of home, that embattled retreat wherein one rules alone, a very real phase of home. *Hogar*, the definitive word for "home," is literally hearth or fireside, with an intimate connoted meaning of warmth and seclusion for which even English has no full equivalent.

The Mexican's word *casa* comes, as one knows the people better, to be extremely expressive, for the outside world, native or foreign, seldom pene-

trates behind the seclusion which wraps around the home life of any Mexican. Here linger a Spanish reserve and dignity that are inherent and sincere, and behind the walls there goes on a home life that is different, perhaps, but as real as, and in some ways even more cohesive than, the Anglo-Saxon. Father and mother, sons and daughters, find in this citadel a retreat and a fortress of unquestioning loyalty, an understanding that often needs no words, and a spirit that brooks no issue save that of the family unit in crisis or in criticism.

The Mexican family group is instinctively organized along patriarchal lines, with the father as the head, the ruler, the arbiter of the destinies of his household. In the upper and middle classes the father (and this means the oldest father, be he grandfather or great-grandfather) heads the family group, and is obeyed implicitly in the smallest details of life. He is the mentor and the inspiration of the sons and daughters, of their wives, husbands, and children, and of all the relatives who gather under his roof. Of all the stable elements which there are in Mexico (and in spite of revolutions and fantastic governmental experiments there are many stable elements) the Mexican family persists as one of the people's safe foundations. The interrelation of the families of each class in the towns, of all the leading groups of the landed gentry, and even of the *ranchero* class, forms true clans (an instinct that perhaps goes back to the Aztec *gentes*, or blood-kin groupings) each of which has a recognized head whose desires and whose existence it-

self dominate their whole social life. Brothers and sisters, aunts and uncles, all have their distinct places; the first cousin is "cousin-brother," and the children themselves early find their proper grouping. Families-in-law enter into the patriarchal arrangement, the wife joining the family of her husband, and when her father and mother unite in social affairs the husband's father, in the male line, is the head of the group. Close into the household are also brought the interesting type of friends who are called *compadres* (literally co-fathers), the *compadre* having been a godfather to one of the children of the household and thus formally brought into an intimate and friendly association which is sealed forever by this honored relationship.

The patriarchal organization also takes in the servants, who are a real part of every Mexican household, have special places at the baptisms and weddings, and are encouraged to link their lives and bring their sorrows and joys to the head of the house or to its mistress. The Mexican family organization is the basis of that patriarchal protection of the weak by the strong which is such a potent element of Mexico's social solidarity.

The Mexican family system has long been expressed in the terms and customs of matrimony. Going back primarily to the Spanish idea of marriage as a churchly rite in which the husband and wife are united with ceremonies analogous to the retirement of the woman to a convent, Mexican marriage relationships have equally definite roots in the customs of the indigenous inhabitants. Mar-

riage with the Aztecs was a contract arranged by the emissaries of the man, and consented to by the woman's family. It was consummated with a religious ceremony followed by a festival such as marks Mexican marriages to-day; there were certain recognized bases for illegal unions and for the disposition of children of such relationships; there were limitations to marriages between blood relatives, polygamy was rare, and there were certain forms of divorce. The patriarchal idea was not unlike that of the Spaniards, and the family of a son often lived in the household of his parents.

With the coming of the Spaniards, the Church took sole control of the marriage rite, and until 1859 the religious ceremony and its correlated significances were those of the Europe of their day, and marriage was a sacrament of the Church. After the so-called Reform Laws went into effect it became almost overnight a civil contract, in name at least. These laws of 1859, however, retained many of the religious features of marriage, holding that its bonds could be dissolved only through the death of one of the contracting parties, perpetuating the patriarchal conception of the rite. Legal separation was authorized under certain conditions, but without permitting either husband or wife to remarry. Under the new Carranza law of domestic relations, however, divorce has now become a part of Mexican legal procedure, and, in addition, marriage has been made easier, in that many of the almost churchly formalities are abolished. The new law adds, however, to the disabilities which

prevent legal marriage (formerly lack of legal age, lack of the consent, error in the statement of blood relationship, intimidation, and fraud) several which did not exist under the former law, such as habitual drunkenness, physical incapacity, incurable disease, and lunacy. In addition, the age at which marriage can be contracted has been raised from 14 to 16 years for the man, and from 12 to 14 years for the woman, the consent of parents or guardians being required up to the age of 21.

The great element influencing marriage in Mexico, however, is not the matter of its forms nor its responsibilities so much as the ancient quarrel between Church and state over the control of the marriage rite. The division of responsibility and the question of authority have so complicated the idea of marriage in the mind of aristocrat and peon alike that it seems as if only in those ranks where social pressure or churchly authority holds sway does any kind of marriage still remain as one of the things that "is done." The Reform Laws, and those of Carranza as well, recognize no Church marriage as legal, while the Catholic Church has held tenaciously that it is the one source of authority for the bonds of matrimony. So far is this carried that the priest does not require proof of a civil ceremony before performing the sacrament, and on the other hand the Mexican government has always consistently refused to recognize church marriages or to deputize priests or ministers to perform the legal ceremony.

There has also been the financial phase of the

question. Civil marriage is theoretically free, but the Catholic Church has always charged a definite sum. In earlier days the Church's fee was relatively very high, a record for the city of Chihuahua in 1884 being that the minimum was P18 ($16 at the exchange rate of the day), though at the time the civil marriage fee was P7.50 ($6).[1] In 1910 the civil marriage fee had been entirely remitted practically everywhere, and the Church fee ranged from nothing, where the contracting parties could not pay, to P5 for laborers earning P1 a day or more, the fee for most of the ceremonies being P10.[2]

These sums were fortunes to peons working for 50 centavos a day, but even though there were many occasions, such as saints' days, etc., when the Church performed the marriage ceremony free of charge, the *fiesta* which inevitably accompanies a genuine wedding in Mexico (and indeed many unions which are consummated without legal or Church ceremonies) is such an expense to the lower class that often they establish their households without the formality of either a civil or a religious ceremony, and even without a feast, making it informal indeed. The peon who could not afford a religious service cheerfully gave up the civil marriage which his priest had taught him was of no particular significance.

That the disrepute of matrimony is a very real

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[1] Interview No. 61, Doheny Foundation Files, the informant a former Protestant missionary.

[2] Interview No. 299, Doheny Foundation Files, the informant a member of the Mexican higher clergy.

condition is borne out by the figures, showing a continuous and almost uninterrupted decrease in the number of marriages performed from year to year, despite the growth in population. The civil register is the only one whose statistics are available, but it is probable that most of those married in the churches have previously been married by a judge, for in the years where the numbers are available for comparison, the total of Church marriages is less than the total of civil ceremonies, as in 1910, when there were 49,938 civil marriages to 40,289 religious ceremonies. The decline in marriage is shown by the following figures, which are for civil marriages performed, so that the number of persons married and also the proportion per thousand of individuals is just double the figures quoted:

NUMBER OF MARRIAGES IN MEXICO

Year	Marriages	Per 1,000	Year	Marriages	Per 1,000
1896.....	52,968	4.19	1904....	61,588	4.34
1897.....	51,000	3.89	1905....	57,881	4.03
1898.....	61,681	4.89	1906....	56,339	3.88
1899.....	59,957	4.71	1907....	60,774	4.14
1900.....	63,722	5.04	1908....	56,359	3.48
1901.....	60,227	4.38	1909....	55,339	3.70
1902.....	60,098	4.32	1910....	54,339	3.58
1903.....	60,117	4.28			

Over against these can be set the marriage records of other countries, the number of marriages and not the number of persons married being given, as follows: United States, 10.5 per 1,000; Hungary, 10.4; France, 7.55; Spain, 8.74.[1]

[1] Additional marriage rates are quoted in the table on p. 88.

This might indicate a low proportion of actual child-bearing unions, this marriage rate of Mexico (which averages 4.04 over the ten-year period previous to 1910) being so low as to presage a terrific loss in population if legal marriages marked even the majority of the child-bearing unions. In the census of 1910, however, the number of "married" persons reported was 4,110,761, or 2,055,380 couples, to which should be added 907,766 widowed persons, indicating roughly a total of 2,963,146 couples who must have formed their conjugal unions in the previous thirty years. Allowing for the deaths which would undoubtedly reduce the proportion of survivors of all the "marriages" of those thirty years, it is safe to take merely the double of the previous ten-year period as roughly the number of legal weddings represented in this population of 1910. The total of legal marriages in the ten-year period is 583,172, our arbitrary figure being 1,166,-344 as the *legally* married portion of the 2,963,146 couples who reported themselves as "married" to the census takers in 1910. If we consider that many of the peon families were known to be unmarried and were so reported as "single," it is certainly not unfair to estimate that at least two thirds of the child-bearing unions in Mexico are illegal and the children thus illegitimate. Other estimates place the proportion of illegal marriages even higher, so that this extremely arbitrary calculation seems to be sustained.

With the figures available, including our crude estimates, it is possible to make some calculation of

the fecundity of Mexican marriages. The figures for 1909 (those for 1910 are incomplete, three important states being missing) show the following, in a calculated population of 14,997,426:

First marriages		104,294	Mexicans		109,942
Widowed		6,606	Foreigners		958
Men—	14 to 19 yrs.	13,298	Women—	12 to 19 yrs.	32,978
	20 to 29 "	30,856		20 to 29 "	17,490
	30 to 44 "	7,962		30 to 44 "	3,795
	45 to 59 "	2,624		45 to 59 "	976
	Over 60 "	710		Over 60 "	211
Civil register		55,450	Church register		47,448

The extremely early marriages in Mexico, of course, lengthen the child-bearing period, the figures for 1909 here quoted showing, in comparison with other countries, the following age groups of brides, including both first marriages and widows:

PERCENTAGE OF BRIDES BY AGE CLASSES[1]

Country	Under 20	20 to 30	30 to 40	30 to 45	Over 40	Over 45
Mexico	59.0	30.1	...	6.8	...	4.1
Russia	58.0	33.2	6.2	...	2.6	...
England	13.5	68.9	13.1	...	4.5	...
Bavaria	6.4	64.8	20.6	...	8.1	...
France	21.2	59.6	13.7	...	5.6	...

Over one fourth of the total number of legal brides in Mexico were, in the Diaz period, between 12 and 16 years of age, and in many states, such as

[1] As usual, Mexico's groupings are at variance with usual standards, hence the inaccurate comparisons. The European figures are from Richmond Mayo-Smith's *Statistics and Sociology*, p. 105.

Yucatan, as large a portion as 82 per cent was often reported as being under the age of 20.

The physical child-bearing period of Mexican women is between the ages of 12 and 35, but, as the census cannot be depended on to list as married merely those who have gone through the legal ceremony, we must calculate, using the data at hand, that if the annual legal marriages number about 50,000, in twenty years the living population of legally married women of child-bearing age (with a death loss of about 15,000 per year in such a group, 12–35 years), would be about 600,000. The legitimate births of that year (registered civilly) were 251,252, but the baptismal records of the Church showed 294,201, which is probably nearer the correct figure for legitimate births, so that the Mexican birth rate per 1,000 legally married women of child-bearing age is about 500. This compares with typical average figures for the United States, about 200; France, 166; Norway, 274, England, 264.

The number of children per marriage is theoretically calculable by taking the number of marriages of a single year and the number of births in the year when the mean number of births from such marriages are to be expected. This gives a surprising result. In Mexico the average number of births comes about four years after marriage. (In England it is six years.) If we take the number of marriages in 1906 (56,339), and divide it into the number of legitimate births in 1910, 294,201, we get about 5.2 children as the average number of

births to a legal marriage, which compares with Spain, 4.47; Italy, 5.15; France, 3.42; Sweden, 4.84. This seems low, but of course the legal marriages, and thus the legitimate births, are overwhelmingly in the higher classes, whose fecundity is invariably below the national average.

The introduction of divorce under the Carranza laws of 1916 was intended to obviate some of these depressing factors and to revive the standing of legal marriage by providing a means of ending it if it had not the elements of permanency. Under the Diaz régime, divorce was impossible, although there was legal separation which dissolved the partnership before the law without permitting remarriage. The grounds for this legal separation included adultery, the birth of a child conceived out of wedlock when judicially declared illegitimate, moral turpitude, drunkenness, and mutual consent. All these, including mutual consent, are now grounds for absolute divorce. The Carranza law added three additional grounds — inability to carry out the purposes of marriage on account of physical incapacity; absence of the husband for more than one year; the commission of a crime meriting imprisonment or exile for more than two years. Adultery on the part of the wife is always ground for divorce, while on the part of the husband the wife has no case excepting, first, if the act of adultery is committed in the home; or, second, if it cause public scandal or result in public insult to the lawful wife; or, third, if the guilty woman ill-treat by word or deed the lawful wife. Divorce by

mutual consent may not be sought until one year after marriage. The innocent party is awarded the custody of the children, except when they are under five years of age, when they go to the mother.

The divorce law was, however, only one of the radical changes made in the fundamental conception of Mexican marriage by Carranza's decrees. Matrimony has long been regarded as having only the end of serving the husband and father, in his pleasure, in his convenience, in his prestige, and in his desire for a large and happy family. Under the Roman Civil Law from which, through Spain, the Church, and the Code Napoleon, Mexico inherited so many of her customs and laws, the wife entered her husband's family practically on the plane of a daughter, her property becoming that of her husband, and he in turn assuming the obligation of her support and giving her full recognition as an heir.

Upon this basis many generations of happy Mexican homes were built, but there is no doubt that in late years there has been a beginning of a restlessness on the part of Mexican women which, however distasteful it is (and it certainly is distasteful) to conservative or typical Mexicans, was bound to achieve recognition sooner or later. It happened to be sooner, and to be given by the Carranza laws, laws more modern in theory than actually demanded by the social organization of Mexico at the time, but placing much new power and independence in the hands of the women of Mexico.

The first criticism of conservative Mexicans is

that under the new laws marriage ceases to be a social institution and becomes a private contract, easily executed and easily dissolved. Indeed, under the old law, the legal concept of marriage was that it was a true partnership in which the wife and the husband were each legally considered as sharing the benefits as well as the difficulties of the other. Now, under the new law, with marriage as a contract of association, the woman as a separate individual has her own obligations to meet as well as her own opportunities to develop. In the emancipation of woman, however, from the old rules which kept her even from independent administration of her inheritance and earnings except with the consent of the husband, the new law is considered a distinct advance.

Even to the present day, the entry of the wife into the Mexican household has been marked by a dowry and a prenuptual contract specifying her contributions to the new family and her rights in the new relationship. All else, including her inheritances and earnings, belonged to the husband and her protection was only as his heir. Under the new law both wife and husband reserve ownership and administration of their respective properties, increases and accessions therefrom; fees, salaries, and wages belong to the party earning them. Even though husband and wife agree to consider all their properties and incomes as one, this is not binding upon third parties, who may seize and collect individually. The wife, however, has prior claim to the proceeds of the husband's property, his

salary, etc. A wife may not, however, render personal service to another or engage in business, etc., without the consent of the husband.

The wife who, through no fault of her own, is compelled to live apart from her husband may, by the new law, receive alimony under a petition to the court, and, most important, the abandonment of the wife and children without provision for their support is punishable by imprisonment up to two years. The law allows the wife, if necessary, to assume the support, and so the headship, of the family, but it also compels her "to contribute toward the expenses of the home if she has property, exercises a profession or business, or is otherwise an earning member of the household."

Even aside from the strictly financial relationships, the organization of the Mexican home, in the legal sense, at least, has undergone great changes. The most fundamental of these (aside from divorce) is the provision giving "equal authority in the home" to both husband and wife in the education of the children, in the determination of family destinies of every sort, and in the investment and handling of family property. The Mexican home was formerly organized on a thoroughly utilitarian basis, with the father as the acknowledged head, while now, as Mexicans who cling to the old idea find, it sets up a dual authority, equally powerful members rivaling one another. An instance, not without its light upon Mexican domestic economy, is found in the new law where the wife is excused from following the husband "if he leaves the

republic and makes his home in an unhealthy portion of the globe or in a place not suited to the social position of the wife." The old law prescribed, without any limitation whatever, that "the wife must live with the husband."

In the case of children, the husband may still, as in the old days, recognize natural sons and daughters born either before or after his marriage, but he shall not take them or an adopted child into his home without the consent of his wife. In addition, the new law authorizes the legal adoption of children, a provision which did not heretofore exist, but a wife may adopt a child only with the consent of her husband, while the latter does not require the wife's consent.

Many of the fundamental supports of the patriarchal domination of the husband have thus actually been removed, and the effects will be increasingly evident as time goes on. But the patriarchal conception of life goes very deep into Mexican psychology, and there is little danger of the finer phases of the traditional Mexican family relationship being lost; if any are changed, it is likely to be in the direction of a higher development of Mexican womanhood and a worthier attitude toward women on the part of Mexican men.

The home life of any community has its roots in the relations of husband and wife, and where, as in Mexico, the first duty of a woman is to meet the sexual exigencies of her husband, the finer phases of wedded life are in continual jeopardy. The control of this phase of marriage by the man has had

much to do both with the closely confined and circumscribed life of the wives and with the notorious infidelity and laxity of the Mexican male. The new independence to which the Mexican wife is approaching seems to promise that she will not only be in a better position to control this as well as other relationships, but that she will achieve the education and broader outlook on life which will give her the wisdom to do so. Heretofore the Mexican wife has had but two functions—the pleasure of the husband and the raising of children. The physical side of the former soon wears away, and the latter persists in an atmosphere often sorrowful and unhappy and lightened only by the wife's true devotion to her children.

Although the Mexican is not without appreciation of his women, the following poetic and sincere tribute by an able Latin observer, gives a list of admired virtues that is most illuminating: "Mexican women are the best balanced I have ever seen. They are good daughters, good wives, good mothers; they are intelligent, sentimental, discreet, lovely, elegant, and prolific; they are virtuous on every side; no one hesitates to state that the women are much better than the men. . . . They are greatly respected by the men. . . . It would be considered a disgrace for a married woman to have to earn her living. Husbands will not allow their wives to work."[1]

Mexican men like to ascribe more influence to their women than actually exists, except, perhaps,

[1] Julio Sesto, *El Mexico de Porfirio Diaz*, p. 218.

in case of fiancées or favorite mistresses. The Mexican gentleman loves to mention the wisdom and influence of his wife, and to quote the ancient Spanish proverb, "If your wife asks you to jump out of the window, pray God that the window is near the street." The Mexican woman is, however, extremely limited by education and by her lack of contact with the world. A woman of good birth almost invariably studies in a convent, sees almost no men except her brothers and her father until she is married, and after marriage hardly meets her husband's friends unless they are in turn the husbands of her women friends, and even then under the most formal conditions, with the limitation of the most patronizing attitude on the part of all the men present toward all the women present. But Mexican women do exercise not a little real influence over their husbands. Clever and beautiful as they are in their youth, they are often able to overcome the inherent authority of the husband and father, but it has always been through cajolery and without the traditions, rights, or privileges which would make their success permanent.

The most admired of all feminine virtues are devotion and constancy, and these the wife studiously develops. They are trained into her from the cradle, and although her limitations and her lack of contact with boys when she is a child may make her morbid, as is often said of her, it does inculcate a conception of the value of outward virtue which she uses in all her relationships, and chiefly in her flattery of her husband. In the manifestation of

their devotion, Mexican women are characterized by a patience and endurance which extend throughout all classes of the republic. The peon women are especially the slaves and the drudges of their husbands and sons; in the middle classes a tremendous amount of work is done by the women in the home, and even in the highest ranks of Mexican society the woman, especially when she grows older, is very likely to become almost a personal servant to her husband, his valet as well as his housekeeper. If such a wife is badly treated she accepts it with resignation, because it is part of the service she feels she owes her husband, just as the peon woman accepts and endures cruelty and physical violence at the hands of a drunken spouse as one of the duties of wifehood. The end of all training of the Mexican women for marriage is inculcated docility and self-effacement, and it is an unwritten law in Mexico that the wife must not complain at her husband's paramour, her support at his hands and the courteous consideration he gives her being the return which she receives for her faithfulness.

This habit and attitude of devotion on the part of the Mexican wife has had much to do with the widespread and open custom of keeping mistresses. In the middle and upper classes, owing in part to the absence of divorce, but more to the male security of domination in his household, the maintenance of mistresses long ago became a recognized social custom. The cult of mistresses may have had its beginnings in the existence of distinct strata of

society, but in Mexico the relationship has reached a more settled and definite condition, as it takes in not only the women of a lower class than the men, but often women of their own class, whom they set up in separate establishments, often with the knowledge of their legitimate wives. In these *casas chicas* (little houses) secondary families are born, the sons and sometimes the daughters of which are brought into the legal family when the illicit relationship is broken off, the law recognizing the right of the father to the children of these unions.

The mistresses are often of very good family, but they have no place in society, cannot be seen openly with their men, and yet at the same time are held almost in slavery by the jealousy of their lovers and the fact that their ease and comfort depend upon his caprice. Thus, as a Mexican writer has put it, "it is not infrequently that one finds in the wife the frivolous disposition of a mistress and in the mistress the virtues of a wife."

The Mexican man of good standing speaks frankly of his "other house" and of his legitimate and illegitimate children, and the gossip of the cities will relate not only the number of "families" of a prominent man, but the location of his houses, and the relationship of the sons and daughters who appear with him when his wife remains at home.

From the highest classes to the very lowest the devotion of parents to children and of children to parents is notable. The families are large, one of the objects of marriage being definitely the rearing

of a fine family, with "race suicide" in the distant future. Indeed, in numbering his children a Mexican will count not only the living, but the dead as well, and not infrequently the illegitimate, carefully set apart in the list.

In the family organization the Mexican boy has many privileges as heir apparent to the family throne. In play, the oldest boy assumes the role of director, and as the children grow older it is he who accompanies and chaperones his sisters when they go about in society, and whenever, indeed, he meets them outside of the home.

The position of the girl in the Mexican home is a part of this same patriarchal atmosphere. She is protected from the cradle, is never seen in public with any men save her own kin, and even in meeting her future husband is never left alone with him. She lives her life along rigidly conventional lines, and until recent years received comparatively little education, except in the arts; each Mexican girl learns to play the piano or some other instrument, to sing, to embroider, or to make artificial flowers. Her duties in the household consist in being beautiful, pious, and stiffly prim when a girl, and in raising children and watching their morals in turn when she becomes a wife.

The manners of Mexican children of the better classes are almost universally good. They are always respectful, do not speak in company unless they are spoken to, excuse themselves when they leave the room, and, with a charm which perhaps the foreigner can appreciate most, always give their

hand limply in good night and in good morning to the guests and to each member of the family, kissing the hand or the cheek of the older people.

The child community of Mexico is, however, an active and vivid one. The precosity of the tropics shortens childhood, but it also brings to the boy and girl a livelier sense of the realities of life than to the children of more temperate climates. In play the Mexican child is eager, and although it is sometimes ludicrous to note the aping of older people in the tiniest of boys and girls, child life runs along in much the same channels as elsewhere; the youngsters grow as rapidly, play as noisily, and fight as energetically as in any town in the United States or England.

The population of children in Mexico is, in spite of the high birth rate, relatively little greater than in the United States. In 1910 there were 2,633,168 children of from 1 to 5 years and 5,312,001 from 6 to 20, a total of 7,945,179 minors, or approximately 16.6 per cent under 6 years of age, and 35.8 per cent from 6 to 20, the population of all minors being 52 per cent of the whole. In the United States in 1910 the population under 6 years was 24,000,000, or 24 per cent, between 6 and 20, about 28,000,000, the total number of minors being 51,500,000, or approximately 50 per cent. This apparent parallel is accounted for, however, by the fact that, while Mexican children die in great numbers in their early years, the adults who die in early maturity are also in greater proportion than in the United States, leaving the

ultimate balance between minors and adults practically the same.[1]

Although the patriarchal organization of the family seems basic in Mexico, among the lower classes, and at times also in the upper, there is a tendency toward the rule of the mother, a condition due in no small degree in the lower classes to the fact that the father has often disappeared long before the babies have grown to childhood. The loose marital relations of the peons and the promiscuity with which they form temporary unions often results in the children of one mother having each a different surname, and more often in a child having almost no acquaintance with his father. The servants in households, especially in Mexico City, speak with great reverence of their mothers, and even grown men will refer matters of importance to the feminine head of their clan.

In the middle and upper classes, also, the woman wields a genuine influence. Indeed, when the grandfather of a conventionally organized Mexican household dies, his power is very likely to pass to the grandmother (his wife), rather than to the eldest son, and she, grown shrewd and wise with years of experience, is often the virtual manager of great estates and a numerous progeny.

In social life, however, it is oftenest the young unmarried women who receive the attention and the adulation of the males—married and single. The position occupied by the young matrons in Europe and the United States belongs in Mexico to the

[1] See p. 91 for comparative populations at different ages.

señoritas, whose charm is alone in their youth and personality, so that when they retire to matrimony and the raising of the inevitably large family, the palm passes easily to their younger sisters, or, indeed, to the older women. Although poorly educated in books, the upper-class Mexican woman has often traveled widely and is shrewd and wise, so that when she has reached the years of "safety" she often takes a place in the entertainment of men guests and distinguished visitors, while the younger women sit in beautiful but distracting silence.

The preponderance of uneducated women in Mexico continually works against the improvement of their position. The school statistics show that the Mexican girl gets even less of such education as there is than the boy. In 1900 there were registered in the public schools 444,897 boys and 251,271 girls, or only 55 girls to every 100 boys. In the private schools the proportion was better, as there were 65,921 girls and 80,788 boys, or 83 girls for each 100 boys, but including the schools of all kinds the proportion of girls to boys in what we would call "common schools" remains very low—71 to 100. Yet even these poor figures are the index of the intelligence of the Mexican women of the future, and represent a vast improvement over the schooling which was given the present generation.

Mexican women as economic units in the community are divided sharply along lines of class. The peon and Indian women are universal beasts of burden, working in the fields and at the native industries such as the hand weaving of cotton and

wool, basket and pottery making. For centuries they have been the mills which have ground the corn for the *tortillas*, which are the food of 90 per cent of the population, an appalling drudgery which has only of late years been lightened by the growing use of mill-ground meal.

During the last ten years of revolution in Mexico these women of the lower classes have borne the burdens of battle in almost as great numbers as the men. Practically every soldier has been accompanied by his *soldadera*. These camp followers furnish almost the only commissary, march with the soldiers, ride on top and under the box cars when the army is moved by rail, set the camps, cook the meals, follow the soldiers into battle to carry ammunition, food, and water, and, when the fighting is over, care for the wounded and bury their dead.

In the middle classes there have, until recent years, been practically no opportunities for the work which, especially to the helplessly imprisoned spinsters, would mean relative independence. Only as teachers in miserable private schools, clerks in suburban shops, and in certain sorts of home work could these women earn a living. Drawnwork (which generally takes the place of or supplements the home industry of lace making), embroidery, and dressmaking have always, as everywhere, been poorly paid.

In the past twenty years business has opened its doors increasingly to middle and even some of the higher-class women. That this has not come before and that it is growing rather slowly even

now is due, first, to the fact that the limited education of women in Mexico has equipped so few for this form of service, and, secondly, because of the social ostracism which even in the middle classes has followed the assumption of steady work by women. Along the northern border this prejudice has been fairly well broken down, but it still persists in the central and southern parts of the country.[1]

[1] Women and children in industry are discussed in part ii, chap. x, pp. 341–345.

VI

MEXICAN HOUSES

THE Mexican house, with its two-foot walls, its grated windows, and its secluded garden patio flanked by cloistered *corredores*—this is Mexico. It is epitomic of the stream of its life, shut away by banks of its own building, circling and eddying within itself, unmindful alike of the call of the rivers of the world and of its own need for outlet. A direct development of Spanish forms modified by native materials, the Mexican house partakes of the grace and harmony of the one and of the solid resistance of the other—both again typical of the nation the two have created.

The Spaniards who built the Mexico we know to-day brought with them, indeed, the same desire to reproduce their homeland that animated the colonists of Virginia and New England. They built their New Spain, but they did more, for they adapted their Spanish homes and types of building to the materials, to the climate, and to the scenery which they found. Mexico to-day is in no sense Spain. The plazas of her villages, the flat roofs of her houses, the towering beauty of her churches,

are her own, and hers alone. The rectangular form of her town plan takes its regularity from the sweeping plains of the New World, while her narrow streets are a heritage from older Europe made hers by the need of confining the tropic sun. The beauty of her bowered patios may be Spanish, but no better or more appropriate house plan could have been found for Mexico.

The Spanish plazas may correspond only to the market places of the Aztecs, but to-day they are so essentially Mexican in fact and in type that no village of a dozen houses is complete without one. In the very beginning the conquerors gave to each Indian village a plaza as the legal center of the communal town site; here gathered the trade and barter of the region, and here the missionary priest erected his church. When Cortez rebuilt Tenochtitlan into the Spanish City of Mexico, the site of the great *teocalli* became the *zocalo* or central plaza; upon one side rose the cathedral, upon another the palace of the viceroys, and upon a third the office of the city's government.

In every town in Mexico there is to-day at least one plaza, and always in the center is a mushroom-shaped band stand surrounded by dwarfed trees and skirted by a broad, stone-flagged walk. There are many inviting benches, and there from morning until late at night peon and creole, native and foreigner, stop to sit and rest. On one night or on several nights each week a band plays, and the entire population walks round and round or sits upon the benches, listening.

The plaza is indeed the center of the life of the community, and often in the smaller villages the market place is located at one end, the church is always there, and always, too, some remnant of a Spanish administrative palace. The main plaza is almost invariably paralleled on one side by the chief street, the main artery of traffic, from which branch off at right angles the straight but narrow byways which are the city streets.

The Mexican town plan is almost invariably rectangular, except where nature has forced an adaptation, as in ancient or mountainous mining towns. This is a relic of the Spanish régime, and where cities trace their origin directly to the conquerors or to the colonial government, this rectangular arrangement and the sprinkling of plazas throughout the town become almost monotonous. In Mexico City the streets were originally determined by the great causeways which the Aztecs had built above the swamps, and these great avenues persist to-day, as do, also, *culs-de-sac* and alleys reminiscent of the mediæval towns of Europe. Under the Spaniards great private estates, monasteries, and cemeteries grew up within the city, and the streets wandered aimlessly between convent walls and grimly barred houses. Under the later viceroys and still more studiedly since, many long, straight streets were cut through old estates upon direct routes, all approaching more and more the rectangular town arrangement which is typical of the newer Mexican cities.

By the standards of to-day, however, the streets

of Mexican towns are extremely narrow, and this narrowness is aggravated by the fact that in olden times there were no sidewalks, and to build them the vehicle space has had to suffer. Thus in Mexico City even the busiest streets are cramped and difficult of passage, while in the older, outlying sections even of the capital, sidewalks are often completely absent for blocks at a time.

The typical Mexican street is about twenty-five feet from wall to wall, with sidewalks three to four feet wide, and the vista one of flat, tinted walls seldom more than two stories in height, stretching off, irregular and lonely, into the distance. Fine houses and hovels stand side by side. There are no lawns, windows are barred and shuttered, and the entrance to each house is closed by double wooden doors, iron-studded and often deeply carved. Only when these doors are opened can the passer-by find any touch of green, for it is almost directly behind them that the Mexican patios or inner gardens are laid out. The houses of two or more stories invariably have balconies on the upper floors, narrow, the railings of ornamental iron, and entered from behind through French windows. No eaves hang over into the street and no chimneys rise above the roof tops. Behind the barred windows of the lower floor sit always silent women and girls, watching for their brief glimpses of life outside. At night the front rooms of private houses are lighted, and as one passes on the street one turns always to glance within through the uncurtained windows. The loneliness in the narrow highway

and the intimacy that one feels with the women who are always watching through those windows make the Mexican street itself typical of the Mexico that is so close about one and yet so distant from true understanding.

This is the residence street in Mexico. Where business thrives, whether it be the business of great stores or the traffic of small ones, everything is easy animation. A Spanish grocery with a glimpse of dingy counters and shelves of merchandise reaching up into the dimness of weathered rafters, a *pulque* stall or a saloon, a pungent barber shop with a row of game cocks tethered at safe distances along the street curb in front, form the background for an eternally repassing throng of peons in peaked hats and lordly blankets, of dull-clad women with babies on their backs, of loud-voiced sellers of fruit and candy, of pompous business men walking and gesticulating two by two, and even of bepowdered ladies on their way to a *merienda*.

The determinants of the type of Mexican houses are tradition, climate, and the building materials available. In the hot country practically all the better houses are made of adobe (sun-dried brick), usually tile-roofed, while the native huts are of airy bamboo or upright sticks plastered with mud and roofed with thatches of straw or piled-up leaves of the palm tree. The country peon is his own architect and builder, and the skillful thatching which one finds in Europe is quite beyond his ken, and not even the wet discomfort which he might avoid has ever taught him to devise a permanent thatch.

The roof is most often straw or palm leaves merely piled on a set of slightly sloping poles, the only effort at permanence being earth which is thrown on top or boards held down by rocks which on some day of unwonted energy the peon found time to put in place. The common palm with its long fronds should make an excellent roofing material, if properly plaited, and yet even this gift of nature for his housemaking has not been adapted. So inadequate indeed are the methods of housebuilding that plantation managers long ago began importing sheet iron for roofs and rough timber for the sides of the huts which they erect for their employees. The floor of the hot-country hut, as of the city peon's hovel, is of dirt and accumulated dust. It is the home of thriving colonies of fleas and other vermin, but these invaders are not connected, in the peon mind, with this architectural peculiarity.

In the towns and on the plateau the type of house is more essentially Spanish, with one or two stories, invariably flat-roofed, with no gardens surrounding them, and with the patio as the most characteristic feature. In the older days the finer buildings were a combination of store and residence, the store on the street level, the residence above. In times of peace the Mexican town plan developed away from this idea, but even to-day the upper floors of the buildings in the central streets of Mexican cities still contain some of their most beautiful homes.

Generally, however, the flat-roofed buildings in a Mexican town are one story in height. These low

buildings are common not only in the earthquake section of southern Mexico, but also in the north and in the coast towns, where earthquakes are not to be feared. Land is not expensive, and, besides, the native building materials do not lend themselves to high construction.

Indeed, the building materials available have had much to do with the heavy architecture typical of Mexico. The majority of Mexican towns are not near stone quarries, and there is little structural timber in the country, except in the high mountains or in the tropical jungles, so that solid stone houses are rare and frame dwellings almost unknown. The materials available for Mexican construction are chiefly the native clay and various soft subsoil stones which are shaped with a saw. The adobe, which is a sun-dried brick made of straw and clay, about 6x12x24 inches, enters into the structure of the majority of Mexican buildings, for when it is covered with plaster it has considerable permanence. In addition to this there is, around the central section of Mexico, a composite soapstone known as *tepetate*, which is shaped as it is taken from the ground, and hardens on drying. *Texontle* is the name given to a light, porous limestone which is also easily cut when first taken out, hardening upon exposure to the air. At Monterrey there is a similar stone called *sillar*, which, when protected by plaster or cement on the outside, gives a comparatively permanent structure. All these materials, from adobe to *texontle*, have to be formed into large blocks in order to be sufficiently

stable for building purposes, and this necessity for large-sized units in structure is perhaps the chief reason for the massive buildings in Mexico.

With the advent of the modern period under General Diaz, there was a great increase in the use of brick of the small oven-baked type familiar elsewhere in the world, while increasingly many structures have been built of stone brought by rail from distant quarries. There are in all Mexican cities modern buildings of these materials, but they have as yet had but little influence upon the type of construction. Modern American or European houses have been built in new sections of Mexico City and elsewhere in the republic, but the tendency toward this type is very slow, and it is doubtful whether, in the long run, these buildings will replace the thick-walled, low structures, with their bright patios, which are in many ways so much more suitable for the country.

Mexican houses are built without cellars. There is a good reason for this in Mexico City, where the moisture from the underlying swamps still tends to seep upward through the soil. But the absence of cellars also means the absence of foundations; even under modern structural methods the foundation is merely a great wide base of cement or stone, set in a trench only a foot or two deep, and proportionate only in breadth to the height of the proposed wall.

The flat roofs of the houses of Mexico are paved with smooth tile or brick and finished with asphalt, or, in these days, made with patent roofing material,

There is only a slight dip in these roofs, but a cornice keeps the water, even in the rainy season, from dripping into the street, and it is carried off, as a rule, in gutters to the ground, into the patio fountain, or to the great earthen jars which correspond to the rain barrel in American rural communities. Another type of permanent roof in Mexican towns is a direct Spanish importation—red or green tile. These are common in small towns and on the *haciendas*, but are seldom found in the cities. They are built with a low pitch and the overhanging eaves carry the rain water into the streets.

Observers are likely to consider that the old buildings, made of native material, are more permanent than modern brick structures with lighter walls. This is, to a certain extent, true, but where this old type of building has been permanent, almost invariably the structures have been built of stone, and a stone building with walls four feet thick and of a height of two stories is naturally more lasting than the modern structure with walls of but eight to ten inches. None of the houses of the Aztecs has come down to modern times, while Europe still has fine examples of Gothic architecture long antedating the original Aztec buildings. The chroniclers of the conquest spoke enthusiastically of the great palaces of the Aztecs, but of them all only a few truncated temple pyramids and a few half-ruined and buried walls remain to reward the archæologist. Such frank descriptions as remain of those great "palaces" tell of low walls, endless forests of posts

supporting the roofs (for the Aztecs apparently did not know the arch), dirt floors, and the almost complete absence of window openings. A picture which, if we combine it with the realization that the houses which crowded the Aztec capital and which the Spaniards and their allies destroyed by hand as Alvarado retreated before the hordes of Aztecs on the "Dismal Night" of defeat, were probably all of adobe, gives a fair explanation of the absence of survivals of Indian domestic architecture. Stone, which usually had to be transported vast distances without any traction animals, was used almost alone for idols, for foundations, and for facing the sides of the pyramids.

The oldest domestic structure which is still in use in Mexico bears the date 1528, seven years after the conquest, and is a private house of modest proportions in one of the older streets of the capital: The buildings of the colonial era, including a relatively few private houses and consisting chiefly of massive public buildings and churches, make up most of the truly permanent structures of the country, for the Spaniards, who were builders second only to the Romans, used the most solid of native materials and such stout cements (burnt lime was introduced by them) that to this day old churches or palaces give way to modern progress only at the urgence of heavy charges of dynamite. These colonial buildings are all either of the ornate and massive church architecture, or the low, ponderous type of the National Palace in Mexico City, magnificent only in its immensity.

During the wars of independence there was practically no permanent building, so that we must again leap to the era of Diaz to find another type of structure. Always the architecture and the materials so well proven by the Spaniards are used in domestic construction in Mexico, but during the latter years of Diaz a number of modern steel buildings went up, the most important being the new Post Office, patterned after the Doge's Palace in Venice, and the National Theater, as yet incomplete. For about ten years, beginning in 1905, there was considerable building of residences of the so-called American type—structures of baked brick, usually without a patio, and with comparatively thin walls. These buildings have withstood a number of severe earthquakes, but otherwise have proven themselves not very well adapted to Mexican weather. The Mexican does not care for artificial heat, so that, although the modern houses and flats are sometimes equipped with fireplaces, these never take the place in the Mexican mind of his sun-warmed patio. In the summer months the patio is as cool as it is warm in the winter, and the typical thick walls are resistant to heat or to cold and keep the inner rooms always relatively comfortable.

The chief characteristic of Mexican architecture is this patio, or inner court. Public and business buildings, even the more modern ones, are built around endless chains of these courts, large, airy, light. The patio of the private house is the typical one, however. The great double doors from the street (true *porte-cochères*) open toward the sunlit

patio, a charming picture framed by the dark, stone-paved passage. The patio in a Mexican house of the better class is filled with potted flowers, and sometimes has grass plots and walks, although the usual type is a cemented, flagged, or graveled space with a fountain in the center. In the old days, when water was distributed by open gravity aqueducts, these fountains were often connected with the city water system and were the only source of water in the house or, where they were not connected, were the reservoirs of the day's supply, which was brought by the servants from the fountain in the near-by plaza.

The patio is flanked on all four sides by tile-paved corridors six to fifteen feet wide, upstairs and down, the floor and roof supported on stone arches or iron posts. The stairway to the upper floor is usually in the corridor, open to the weather. The rooms which face upon the court—and this is practically all, because there are no outside rooms except those looking on the street—are fitted with narrow double glass doors, giving them their only light and air. Wooden shutters on the inside shut out the light when desired.

The rooms are either square, large, and coldly high, or in the shape of a long rectangle (as the dining room and the *sala,* or drawing-room). Mexican rooms are usually as much as twelve or fifteen feet high; the ceilings are not plastered, and either the great closely studded four-by-eight-inch beams are exposed, or are covered by a painted canvas ceiling, which rises and falls in the wind with ghostly

deliberation. The walls are usually painted, wall paper being uncommon. The woodwork is painted, though sometimes there is handsome paneling of French style. The windows and doors are all long and narrow, two doors or two windows opening French fashion.

All the rooms of a true Mexican house, including the bedrooms, are floored with tile, the Mexican supply house presenting a large stock of different patterns, these proper for a parlor, those for a dining room or bedroom. Such floors may be partially covered with rugs, but often the cold tile presents the only floor surface. In the more modern houses, and where foreigners have insisted, wooden floors are laid, and rugs are used as elsewhere in the world, but the dampness of the wet season makes carpets at least inadvisable.

Even in the best of the old houses there were no comfortable bathrooms, and the only conveniences were a toilet and a shower upon the first floor, but not always on the second. The Mexican bathroom is for bathing only; it is a large tiled or cement-floored chamber into which no sunlight ever enters, with a drain in one corner and with a shower bath for the warmer, and a movable metal tub for the cooler, season.

The Mexican kitchen, a great, dark hole at the back of the house, is fitted with running water in a stone or cement sink, and on one side is a wide, colorful brick or tile counter with innumerable square holes where charcoal is burned for cooking each individual dish. Oil and gas burners are now

found, but few coal or wood stoves, and little electrical apparatus.

Mexican houses are not well adapted, architecturally, to cleanliness. Even bedrooms seldom get sunlight, and are very liable to be damp, and in the rainy season even moldy. Such scrubbing of the tile floors as is done makes them more than usually slippery for several days afterward, and it is at the peril of one's life and limb that the servants of a well-regulated Mexican house are kept busy with wash pail and soap.

Furniture varies with the social or race class of the owner, the Indians in their palm huts being contented with mats for beds, a rough brazier made out of an old square five-gallon oil tin, another of these universal vessels for the day's supply of water (for all purposes), a few pottery bowls, a grinding stone for *tortilla* meal, sometimes a table and chair (but as often not), and always a shrine before which burns a tiny candle. Light, when used, is by tallow or paraffine dips. There is literally nothing else in the one-room hut of adobe or bamboo, and apparently no need for anything.

The workingmen of the cities show their advanced caste only in the possession of a rough bed of flexible sticks or leather thongs and a table and chairs of begrimed white pine. The Mexican house of higher type is furnished well or ill, as the taste may be, but in the vast majority chairs and a sofa of Austrian bentwood, cane-seated and draped in the back with a bit of coarse embroidery, are the basis of the furnishing of the *sala*, or drawing-room.

A round table, sometimes books, and often, too, artificial flowers under glass, help to fill the dreary space of the immense rooms. The floors are of tile, with a few rugs, or sometimes only strips of matting. In the upper classes the furnishings are often elegant, always expensive, and usually dominated in taste by the style most favored in the Paris department store from which they came.

As a rule, Mexican rooms are either bare and cold or overfurnished, a fault as much as anything of the architecture which has made them long and narrow or else square in such exact proportion to their great height that they give one the sense of being inside a perfectly proportioned hat box—probably the two most difficult shapes of room to furnish pleasingly.

The dining rooms are fitted in the taste of the owner, but never with great attention to details, even the linen (where used) being of poor quality, and the silver almost invariably of the German variety, in metal and in style.

The typical Mexican bedroom is usually cold and uninviting, with its tiled floors and tiny rugs, its great wardrobe and the "washstand set" on a bentwood stand in the corner. The upper classes, of course, use modern beds, usually elaborately fitted. The middle-class bed is very likely to be a frame of plaited leather thongs, with a thin mattress, but the ownership of a fine brass bed with a lace spread and "snowy" linen is one of the signs of prosperity. When this is possessed, it is placed in the front room where it can be seen by all passers-

by, and in the early evening, when the rest of the house is practically unlighted, this elaborate bedroom will have its lamp burning and its shutters wide open, for all the world to see and admire.

The universal bed of the Indian and peon is the *petate*, a woven mat of palm fiber, laid upon the floor. There, with his single *zerape*, or blanket, he lies down to sleep, sometimes with something under his head, but more often with nothing, a bed astonishingly comfortable even to one who is used to mattress and springs. In Yucatan and some of the other hot-country sections hammocks are used for sleeping. The Yucatan hammock, of finely spun henequen fiber, or of linen or cotton cords in varied colors, is so broad that one could lie full length across it. To sleep in a hammock, one lies at a slight angle, so that the body is not quite horizontal; when the hammock is properly made and swung this makes one perfectly comfortable. In the hot country, where insects are common, beds and hammocks all have mosquito bars, which, as a rule, have to be extremely finely woven if they keep out all the pests. Indeed, very often the mosquito "bar" is a shroud of thick cheesecloth, or even muslin, which keeps out the air as well as the mosquitoes, although when one has attempted to sleep without this protection one is likely to be willing to forego his air in the future.

The lower classes of Mexico seem to have a national habit of sleeping together, the entire family and often the domestic pets being huddled into a heap in a single chamber, with all the doors and

windows closed. In the plateau, during the winter when the nights are chilly, it is probably literally true that the warm-blooded family pig is often included in the pile. A traveler in the tropics reports that when stopping one night with an Indian family during a chilling storm, he was given the position of honor at one side of the hut, and discovered that this spot was desirable because the pig slept on the other side of the separating wall of bamboo and communicated a great deal of excellent animal heat.

The statistics of Mexican housing are as yet inadequate, but in 1900 a number of the states, representing about 7,000,000 inhabitants, or about half the population, gathered some data. As this group included the Federal District with Mexico City, and states with large rural population like Puebla, Tlaxcala and the state of Mexico as well, these reports can fortunately be taken as an index of the type of housing in Mexico, and doubling the figures for houses and families gives a fairly safe approximation for the whole country. In this group there were 847,523 buildings of one or more stories, or 1,695,046 for the whole country, and 803,257 huts, or 1,606,514 for the country. Of the total number of buildings in the half of the country reporting, 803,257, as above, were huts, 833,035 were one-story permanent structures, 13,362 two stories, 1,069 three stories, 52 four stories, and 5 of five stories or over. All of the last named were in Mexico City, and probably constitute the total for the country, while 45 of the four-story and 659 of the three-story structures were also in the capital,

Of actual dwellings, the figures are given for "apartments" and for "one-room apartments," 71,031 of one room and 902,744 of more than one room being reported for the section under survey, 142,062 one-room apartments and 1,805,488 of more than one room being the approximate total for the country.

The homes are divided into three classes—those "living in houses," those living in one room, and those living in huts. The following approximate figures for the country were obtained as above by doubling the figures for the section surveyed. It is unfortunate, but perhaps not entirely accidental, that the figures do not go into the detail of the sizes of the families living in single rooms or huts, the division being only between those living alone and those living in a conjugal state ("families of two or more"). However, from these figures we find that the Mexican living arrangements are about as follows:

	Single Persons Alone	Families of Two or More	Total Families
In houses or apartments	70,213	1,440,610	1,510,823
In one room	9,158	96,672	105,830
In huts	38,580	1,753,986	1,792,566
Total	117,951	3,291,268	3,409,219

This shows, of course, the tremendous preponderance of the rural community living in huts among the poor, and is surprising in the relatively small number of poor living as families in one-room apartments. By these figures the typical Mexican

family is approximately four in number, which seems low, and yet this is borne out by checks against birth rates.[1] The number of single persons living alone seems about 4 per 100 households, as against the proportion in France, 14; the United States, 3.6; and Germany, 7.

As to the kind of dwellings indicated by these statistics, the only divisions we have are between huts and other houses, but even without further data the figures are still illuminating, for the total of one-room apartments and huts is only about 50,000 less than the number of respectable dwelling places—half the homes of Mexico are in the veriest hovels.

The matter of crowding and tenement life is one of the important phases of any national living problem. In Mexico, however, it is chiefly a condition of the capital, where alone true tenement and slum sections are found. The Indians and peons live in miserable hovels all over the country, and there is always crowding (usually from choice), but except for the capital there is nothing that can be considered a chronic condition.

The slums of Mexico City are in the southwestern and southeastern sections, and consist of what are called *casas de vecindad* ("contiguous houses" or "neighborhood houses"), ancient buildings with rows of rooms, like stables, about a single patio, usually with a stone fountain in the midst of a vast mud puddle, in the center—the only water supply for hundreds of people. Usually one story, but presenting more terrible conditions still when

[1] See p. 219.

there are two stories with winding back-corridors, these buildings consist of single rooms, each one the home of from four to twenty people. Without furniture, sometimes with a hand loom crowded into one corner, and a poisonous charcoal brazier cooking a vile stew in another, these places, usually not over twelve feet square and with a yet lower ceiling, reek with the stench of unwashed humanity, foul air, excrement, and decaying food—but they are home to nearly a quarter of the city's population.

Official reports on crowding in Mexico City made in 1900 showed that in one district there were 2,550 rooms with 18,523 inhabitants, or an average of seven to a room; another counted 11,000 rooms and 42,000 persons. The Superior Board of Health estimated that the overcrowded population of the capital was 100,000, and that in one section about 1,000 rough huts housed 5,000.

Even these figures give an inadequate picture of conditions, for the average of four or five or even seven to a room over large areas leaves only the imagination to picture the hundreds of rooms that actually do house twelve or even twenty persons, brothers and sisters, parents and children, cousins and brothers-in-law, grandparents and young girls, under the same roof, the same ceiling, and on cold nights, certainly, under the same blanket.

Not the least terrible feature of this crowding is the huddling of the homeless into the *mesones*, or ancient hostelries where once horses and mules, carts and stagecoaches, had headquarters, but which are to-day cheap lodging houses of the vilest

sort. In the great city where the homeless are numbered by thousands, these places, charging from three to five centavos a night, were the only homes of perhaps 25,000 persons in the time of Diaz, and to-day their patronage has been swollen by increasing poverty and by the influx of refugees from the interior. The city used to maintain two public dormitories, and three or four more were kept by private individuals or benevolent societies, but these were not so well patronized, perhaps because the guests were required to wash their faces and hands in the morning, or even to take a bath. In the common *meson*, the patrons, men, women, and children, begin to arrive about eight o'clock. Each pays his three or five centavos, takes a *petate* from a pile at the door, and picks his place in the great *galeras* (or galleys) where were formerly the stalls of horses. Eighty or more people of all kinds and ages sleep in each *galera*, from 200 to 300 in a single *meson*. Some of the sleepers are sober, some are drunk; some are clothed in all kinds of coverings, some practically bare, lying side by side like members of the same family, men, women, and children.

Effort has been made in many directions through a number of years to remedy some of the evils of the housing systems of Mexico. City and private charity has done something, but the most important and in the end the ultimate hope of reform has been in the hands of private commercial concerns. About Mexico City several companies, foreign as well as Mexican, have built model "colonies" for peons as well as for the middle and upper classes.

All through the later years of Diaz the rising middle class of artisans and the more intelligent peons were buying, on easy terms, the houses in each new suburb as it was opened. Certain conventions long considered indispensable in Mexican homes have had to be followed, but the new "colonies" had all to be well drained, and with plenty of water. Something was still being done under Carranza, while many of the higher-type Mexican exiles are planning their part in such a revitalizing of the community—when the time shall come for them to return to Mexico.

In the interior, both on plantations and at the mines, the employer has long had supervision over the housing of his employees. On most *haciendas* the huts of the workers belong, in some way or another, to the *hacendado*, and are built and fitted well or ill, according to his lights. The native is not always a wise judge of what he will ultimately enjoy, but in time, and under sufficient surveillance, he uses the conveniences provided for him.

The work of this type which is being done by American and British companies in the oil fields and in the mining camps deserves the highest praise, even though such organizations know, better than any others, the definite financial return that comes from happy and healthy employees. None of the companies can be singled out here, but the work they have done individually, and the example which they have set their workers and other employers of Mexican labor as well, must, in years to come, bear ample fruit.

VII

MEXICO'S FOODS

IN no phase is the unity of Mexican life so marked as in the people's choice of food. Except for the highest creoles, who retain their European tastes, the same types of food are taken and relished by all classes. Quality and quantity vary with the income, but there runs through the entire scale of Mexican diet the same desire for and enjoyment of rich, greasy, and nitrogenous foods, relieved only by unleavened corn and fiery condiments. The Indian and the peon live almost solely on *tortillas* of corn meal and the nutty Mexican beans, or *frijoles*, cooked with grease and flavored with hot peppers; the highest mestizo eats a solid meal which is of much the same dietary consistency, and frankly prefers *tortillas* to white bread; even if he takes white bread from a sense of class, he still has *tortillas* with the *frijoles* that round out his every meal. No Mexican seems really to enjoy a salad and eats little fruit at meals, and the sweet is taken in a concentrated form, the usual Mexican dessert coming from the confectionery store. In the upper mestizo classes the hot pepper, or *chile*, is almost as much

esteemed as it is by the Indian, and the majority in all classes add the stimulant of liquor or strong coffee whenever procurable.

Corn or maize is the staff of life in Mexico. Wheat does not grow successfully there, while corn is perfectly indigenous, so that the corn diet of the Mexican was originally forced upon him by the climate. The fact that the Mexican, even of the upper classes, actually prefers corn to wheat food would seem also to indicate that the climate has done more than force him to grow corn; it has forced him to desire it and eat it.

The Mexicans as a people are meat eaters whenever it is possible, and there is comparatively little real demand for vegetables. Potatoes are not used generally, rice being commonly substituted, and where in the United States the secondary staple vegetable is the tomato, in Mexico squash takes its place. This is served in a number of ways on the middle-class table, but is never particularly appetizing or tasteful, and as a general thing the Indian and peon classes have very little interest even in this one common vegetable. Meat is usually fried, or, if roasted, is either thoroughly larded with skewers of fat or basted in a greasy sauce. On the tables of the wealthy two courses of meat are common, and eggs take the place of fish or precede the fish course as a regular part of dinner.

The day's meals of the middle and higher class Mexicans begin with a light breakfast called *desayuno*, taken on rising or in bed about seven o'clock. This consists of strong coffee with hot milk, or

thick chocolate, and sweet rolls of wheat flour—the only formal appearance of wheat in the Mexican daily menu. *Almuerzo,* which is literally translated breakfast, but is perhaps more properly called luncheon, comes at about eleven or twelve o'clock. This meal starts with a thick soup, followed by a single meat course, sometimes squash as a separate course, then beans with *tortillas,* and last an insipid dessert. Coffee or liquor is usually served with this meal. In some sections of the country *almuerzo* is truly a second, heavier breakfast, served about nine or ten o'clock, and the noon meal is called *comida,* or dinner. The long period from the finish of the midday meal until eight or nine o'clock in the evening when the heavy dinner is served is broken by a "tea" or *merienda* of coffee or chocolate and cakes. The Mexican business man does not make this "tea" a regular part of his day, as is common in other countries where there is a long afternoon between luncheon and dinner. If he takes any refreshment at all it is in the form of a drink at the club or *cantina* (saloon), though this does not partake of the formality of the *apéritif* hour in France.

The dinner (*comida,* or, in some sections, *cena,* literally supper) is the heavy and formal meal of the day, and its hour persists with Mexicans the world over—8 to 9 P.M. Again there is a soup always followed by eggs, either as a substitute for the fish course or preceding it. After eggs or fish come the meat courses, one of them served with rice; in the higher classes bread has appeared with

the eggs or fish. Following the meat courses come the inevitable *frijoles*, served in any of their many ways, but usually for the heavy meal cooked a little less richly than at noon. *Tortillas* are almost invariably served with the beans on the Mexican table. Again, the dessert is an insipid French pastry or a square of paste or jelly of guava, plum, peach, or apricot. Coffee follows or is served during the meal. Where it can be afforded there is always wine, and with the demi-tasse either imported cognac or a small glass of native brandy often poured into the coffee.

The diet of the peon laborer varies surprisingly little from that of the higher classes. The ordinary breakfast of the peon is bought in the doorways of saloons in the peon quarters, where women sell coffee or chocolate or a tea made from an infusion of orange leaves, at one to two centavos a cup. Another centavo of bread and a tiny glass of native brandy (formerly one centavo) to mix with the coffee or tea constitute the peon breakfast. On special occasions he will have a later *almuerzo*, or breakfast, of what we might call *chile con carne*, a sort of soup with beans, sometimes small particles of chopped meat and red peppers, a dish which in the old days, with its accompanying three *tortillas*, cost three centavos. The noon meal, taken at much the same time as the more formal *almuerzo* or *comida* of the middle and upper class Mexican, consists of a soup, then a big piece of meat with rice, and a dish of *frijoles* with from six to eight *tortillas*. Such a meal as this used to cost from six to ten centavos.

This luncheon is usually eaten in the open air at one of the innumerable little stalls in the market places or in the doorways of houses along the streets where the peon workmen are to be found. The *comida*, or dinner, is usually taken in the *fonda*, or rough Mexican restaurant, where only the lower classes or those addicted to their stimulating diet go. This *comida* (perhaps better in this case *cena*, or supper), is usually a light meal with the peon. He formerly got his large dish of *frijoles* cooked in grease for two or three centavos, and in the old days the price of five *tortillas* was one centavo. Chopped meat, boiled or fried with *chile*, sometimes entered into this meal, under the name of *carnitas*, or "little meats." In Mexico City this, and usually the noonday meal as well, is washed down with an immense glass of *pulque*, of which the price used to be two cents for almost a quart. These prices have now about doubled.

The two staples of the Mexican diet, then, are *frijoles* and *tortillas*. There are two types of Mexican beans; one is a small black variety very little larger than the Boston or navy bean, and the other the large pink kidney bean which is known in our own markets. No other sort will be used by a Mexican, for the nutty flavor, particularly of the small bean, is really vital to his enjoyment of his food. The beans are bought dried, are soaked, and boiled over a slow fire. The water in which they are cooked forms the sauce in which the beans are served, with practically no addition except the seasoning of salt. This is the form in which they

are usually eaten at the heavy dinner at eight or nine o'clock in the evening. The beans served at the noon meal next day are those which were cooked for the previous night, recooked in more elaborate style. The usual way of preparing beans for the second serving is to pour them with the sauce into a hot skillet of lard, sometimes stirring in a plentiful amount of grated cheese. The whole is cooked a few minutes longer and served almost dry. Sometimes beans are mashed and "refried" until a thin brown crust covers both sides of the omelette-shaped mass. The cooking of beans in Mexican style is a true art, and provides a dish which appeals to any appetite. The Mexican himself recognizes the universality of beans in his diet, and his jocose invitation to a meal is, "Come home with me to beans."

The Mexican *tortilla* is made of ground corn which has been soaked in lime water so that it compares more to ground hominy than to the American type of corn meal, which is unknown in Mexico. In former times the corn was all ground by hand on rough stones by the women, nearly eight hours being required to grind and make *tortillas* for a family of four or five. In the past fifteen years, however, machinery has gradually been installed all over Mexico for the grinding of the *tortilla* meal (called *nixtamal*) so that this tremendous waste of the women's energy has now been very largely obviated. The nature of the combination of corn and lime requires that the meal be ground wet, and much of the flavor is lost if it is de-

hydrated after grinding, although this is done and the dry *tortilla* meal can now be bought in Mexico and also in the United States. The preference for the wet meal, however, brings the Mexican *tortilla* maker to the *nixtamal* mill early in the morning, either to carry her own corn to be ground or to purchase the product by the pound. The *tortilla* meal having been prepared, a small ball is patted into shape between the hands until it reaches the dimensions of a large pancake and the thickness of a piece of cardboard. The lime water furnishes the only seasoning, and no salt and no shortening or leaven is used. Cooking is done on an ungreased hot plate, usually a sheet of iron heated over a charcoal brazier.

Tortillas are cooked rapidly for about three minutes or until they are slightly browned. They are usually eaten hot, and when a peon woman carries food to her man at his work, a dozen fresh-cooked *tortillas* will be carried in a napkin to keep warm. The *tortilla* when cooked is not crisp and retains considerable of the original moisture, and can be reheated again and again with little loss in flavor. The *tortilla* is used by the peon (and by the middle-class Mexican as well when he is eating his beans) as a spoon, a twist of *tortilla* being skillfully formed into a cup with which the mixture of beans and liquid sauce is conveyed to the mouth. The trick is more easily learned than the use of chopsticks, but the marvel to the foreigner on first seeing it accomplished is no less than is his wonder at the skill of an Oriental.

While the *tortilla* is the staple and universal form in which the Mexican absorbs his staff of life, corn is served in many other styles, but invariably the meal is prepared in identically the same way—that is, by soaking the grain in lime water, removing the tough "skin," and then grinding it. The most famous of the other forms in which corn is eaten is the *tamal.* This is a roll of corn meal three inches long and an inch thick, with meat, raisins, or a soft sweetmeat in the center, rolled in corn husks and cooked by steaming. The meat is usually in a hot sauce of *chiles,* but the sweet *tamales* are fully as typical of Mexico and almost as much esteemed. The *tamal* is not a staple of the Mexican diet, as the foreigner is very likely to suppose. It is prepared for special occasions and is eaten with great relish at picnics, in the refreshment rooms of the parks and plazas, and at the *meriendas,* or afternoon tea parties. There are certain occasions when the *tamal* is absolutely indispensable for the celebration of a festival, and a *tamalada,* or "party-for-eating-tamales," is an event looked forward to for many days.

Another enjoyable specialty of the Mexican diet is the *enchilada,* which is made from an already cooked *tortilla* sprinkled with cheese, chopped onion, garlic, and hot *chile* sauce. The *enchilada* thus prepared is recooked on a dry skillet, rolled into a tube about an inch in diameter, and served piping hot.

Other corn-meal foods of Mexico are *cocoles, chavacanes,* and *pemol. Cocoles* are cakes or biscuits

of corn meal, half an inch in thickness and two inches in diameter. They contain some shortening and are served hot. *Chavacanes*, which are better known, are a mixture of the corn meal with shortening and eggs. They are made up into flat round or square crackers, and cooked rapidly, as *tortillas* are. *Pemol* is a corn cake made from the same meal. In consistency it is not unlike Scotch shortbread, and it is made up in a variety of forms, from tiny cakes the size of a half dollar and a quarter of an inch in thickness, to large horseshoe loaves which are sold for special occasions and may be compared to German *Kaffeekuchen*. The *gordas*, or "fat ones," are the Mexican sandwich, a thick layer of corn meal inclosing meat, *chile*, and *frijoles*, cooked, and eaten cold. *Posole*, corn meal in big balls, cooked and cooled, forms, like the *gordas*, a diet for long marches and particularly for long canoe trips where fires cannot be lighted. The Indians provided with this food are perfectly equipped for a trip of several days. The balls of meal are either eaten dry or mixed to a gruel with water scooped up from the boatside in the gourd or half coconut shell which, with this food supply and his blanket, constitute the Indian's "outing equipment."

The Mexican diet is famous the world over for its use of hot peppers, or *chiles*. The probable explanation is the need of an edge to the appetite and a stimulus to the formation of gastric juices to make up for the deficiencies in the rather insipid materials used in Mexican foods. The Mexican cook is a great connoisseur in the use of *chiles*, of

which there are many varieties. Each has a flavor that is quite distinct from its hotness; cayenne pepper and the so-called "tabasco sauce," whose chief virtue is their piquancy, are not used extensively in Mexico, and where attempts are made by Mexican and other cooks outside of Mexico to approximate the Mexican dishes by the substitution of cayenne for Mexican *chiles*, the result is a hopeless failure. In the preparation of most "hot" sauces the Mexican cook uses two or three different sorts of *chiles*, combining them with onions, garlic, and, in the case of some of the most famous sauces, with chocolate and spices. The famous Mexican dish, *mole*, which is a rich sauce of a dark red color served with turkey or pork, is made by boiling three or four kinds of peppers with chocolate, garlic, spices, etc., for many hours, and the final touch is given by the sprinkling of *chile* seeds over the whole—the seeds being the hottest portion of any *chile* or pepper. In addition to the use of *chiles* in cooking, there are certain sorts, notably the little green *chiles* about an inch long and extremely hot, which are chopped up with onion and spices and mixed with vinegar in uncooked sauces. These are used to give zest to any dish from *huevos rancheros* (eggs cooked in a piquant tomato sauce) to the beans at the end of a long and formal meal.

Chiles are also eaten separately, the hottest of hot green ones being placed in little dishes on the table to be eaten raw, like olives, their resemblance to which harmless fruit in size and color is likely to deceive the unwary foreigner who sees his

Mexican friends eating them unconcernedly—but he never again eats an "olive" without careful examination. The large, sweet green *chiles* (like our mango-peppers, but much hotter) are often stuffed with chopped meat or soft Mexican cheese, the careful Mexican cook scalding the pepper and removing its tough outer membrane before stuffing. The stuffed *chile* is then dipped in beaten egg and fried—a delicious dish if the Mexican cook has not left too many of the hot seeds inside in order to flatter the taste of her compatriots.

Another characteristic of the national diet is the use of fats and greases. Butter is considered expensive and is used only by the well-to-do, the American imported brands being little dearer than good Mexican butter. Lard is also costly, so that many of the typical Mexican dishes are made and depend for their flavor upon the use of mutton and beef fat. The upper-class Mexican housewife finds that her servants crave fats to such an extent that they will eat even lard just as it comes from the market, a fact due, probably, to the lack of shortening in their favorite corn and beans.

The typical Mexican is very little interested in the vegetables in his menu. It is said that when the first Chinese colonists came to Mexico their vegetable gardens were the sights of the towns where they settled. Around the capital and other cities there are many truck gardens which serve the Europeanized Mexicans and the foreigners, but even counting the squashes, which are raised in astonishing quantities, the onions, which are of

course esteemed, owing to their strong flavor, and tomatoes, which are needed in the preparation of many dishes, the total production of these truck gardens is extremely small in proportion to the population served. The ordinary salads are raised for the upper classes, but even the native *aguacate* (alligator pear or avocado) is used more as a butter than as a salad. The Spaniards introduced the chick pea or *garbanzo* into Mexico, and in certain sections, notably on the west coast, this delicious bean is extensively used, but as its food properties are apparently identical with those of the *frijol* or Mexican bean, it adds no variety to the diet. There is perhaps a growing use of vegetables, but the canned or tinned goods imported from the United States or France seem to be preferred. Potatoes in Mexico are seldom good unless they are imported. The native cuisine does not confer the crown of gastronomic necessity which is given them in other lands, and the Mexican truck farmer, even if he plants them, seems to resent the time they take to grow, and digs them up when they are mere buttons. Rice is common and takes the honored place of potatoes with the meat course of the Mexican dinner. In its cooking the Mexicans are no less artists than the Chinese, the grains coming out firm and dry, for it is cooked in scalding grease and water; this cooking, and tomatoes and a delicate seasoning, give Mexican rice a flavor unexcelled in any cuisine.

Tinned delicacies have been in use in Mexico for many years, for foods imported from abroad are

esteemed by those Mexicans of the upper classes who have traveled, and in general by those who affect European manners. In addition, the difficulty of obtaining a variety of food in the hot country where there are no refrigerator cars, and no food is raised save the actual staples, increases the market for tinned goods. Danish butter, as well as American tinned meat, fish, and vegetables, are part of the regular diet of the middle and upper classes in all of the country south of Mexico City; in Yucatan, where very little fresh food is raised, the tinned goods imported from abroad give almost the only variety of the diet. Throughout Mexico tinned salmon and, interestingly enough, sardines, have long been popular with every class, including the peons, who consume ludicrously large quantities of sardines at festival times when they are spending money freely.

Fruit is seldom used as a part of a meal in Mexico, but is eaten freely between meals. Bananas, oranges, pineapples, and melons are common, as well as other native fruits, subtropical and tropical, such as the *zapote*, the fruit of the *chicle*, or chewing-gum, tree, the *tuna*, or prickly pear, the fruit of the nopal cactus, the *chirimoya*, a relative of the paw-paw, the *pitahaya*, also a cactus fruit. Excellent oranges, limes (called *limones*), and lemons (which are *limas*) are native, and some grapefruit is grown on imported trees. There are few good native apples in Mexico, but American boxed apples are imported and are sold in most of the cities.

The Mexican of whatever class usually "drinks something" with his meals. In the country sections where *pulque* is made, the low-class peon hardly considers any meal worth having without a big glass of it. His breakfast is usually taken without this beverage, but in its place he often has a small glass of native brandy or alcohol, which he pours into his coffee. This drinking undoubtedly has an as yet undetermined, but probably very great, effect on the general digestive health of the Mexican of the lower class, for the tradition is very strong, and many of the American plantations in the hot country followed native custom by issuing a drink of *aguardiente*, or native rum, to their workers each morning before they went to the fields. There is also much adulteration of liquor in Mexico, government inspectors having reported that many saloon keepers go so far as to mix nitric acid with the *tequila*, or native brandy, which they dispense. A "warm feeling going down" is an undeniable result, but the effect on the digestive system is something not to be discounted in any discussion of the poor assimilative ability of the Mexican stomach.

The upper classes use wine almost as much as do the French and Italians, most of this being imported, although there are some fairly good table wines made in Mexico. Cognac is used as an appetizer as well as with coffee, but mixed drinks, and even whisky, are used only where foreign influence has made itself felt.

Coffee and chocolate are the two nationally

popular "soft" beverages. Coffee is made by combining a concentrated essence with hot milk or with hot water for the after-dinner demi-tasse. The extract is usually homemade, being prepared by the drip method, poured through the fine grounds again and again. A very strong essence results, and in the country a wine bottle full of this cold, syrupy coffee is placed in the middle of the table and the guests themselves pour out the quantity they wish, usually about a quarter or a third of the cup, filling with sizzling-hot milk.

Chocolate is prepared by the Spanish method, which includes a steady "whipping" of the boiling chocolate, sugar, water, and milk with a wooden beater whirled between the two hands. The result is an extremely rich and very delicious mixture which can be thinned, if desired, with hot milk or cream, though this outrage is usually committed only by foreigners. When taken in the proper Mexican fashion the chocolate is sopped up with the white breads, sweetened or unsweetened, which accompany breakfast and the *merienda*, the occasions when this drink is served. Mexican chocolate is mixed with cinnamon before it is marketed, a method which was imported by the Spaniards, and substituted the older Aztec system of flavoring it with vanilla. The mixture is very good for cooking, but makes the chocolate unpalatable for eating, as it is not sweetened in the cake. Thus even in the tropics, where "home grown" chocolate can be bought in this form at every village, it is not used as a food, as might be expected among a

people who certainly appreciate the flavor and nourishing qualities of the cacao bean.

Tea is a drink which most Mexicans do not like, and relatively small quantities are sold. An infusion of orange leaves and local drinks brewed from herbs are used in limited quantities, but little imported tea is drunk save by those of European manners. Quantities of nonintoxicating drinks, typical among them very sweet alleged fruit syrups diluted with plain water, are consumed, though not with meals. The Mexican bottling companies make various sodas of the usual varieties and ship bottled spring water all over the country, the public waters not being used for drinking by those who can afford the reasonably priced mineral water.

Food in a Mexican household is invariably bought from day to day, even to the one-centavo package of salt which tops the market basket. This is due, to a certain extent, to the fact that if there is a large supply of food on hand the Mexican cook will invariably be wasteful and is as likely as not to cook three different kinds of meat for a single meal if they happen to be on hand and she has no other instructions. The Mexican housekeeper of the upper classes very seldom does her own buying, even though she may feel that the "commission" collected by her cook is improper, for the prices in the market places are never fixed and the cook is in a much better position to bargain than the fine lady. The cook in a Mexican household is a person of no mean importance, and she will seldom, if her purchases are bulky, carry them home herself, but

will hire a *cargador*, or porter, with a great round basket on his head to follow her home in state.

The life of the servants in a Mexican menage is distinct from that of the family, even while the feudal and paternal attitude has to be maintained. The division is no more distinctly manifested than in the matter of eating. The lower-class Mexican, raised on his diet of corn, beans, and *chiles*, does not, when he first joins an upper class household, find any satisfaction in the food which is served to his masters. If he is given plenty of coffee and plenty of grease in which to cook his favorite foods, he cares nothing for the more delicate viands which go to the family table. In this he has been skillfully encouraged through many centuries of caste life in Mexico. Mexican servants are paid their salaries, and in addition are given a definite per diem, usually twenty-five centavos or less, for their meals. This does not by any means prevent the use of the food which is prepared for the main table unless the housekeeper is extremely watchful, but what is taken will be largely meat, fats, and gravies, which they will reseason to suit their less delicate appetites. Above all things in their food low-class Mexicans desire quantity—and grease.

The fresh-food distribution system of Mexico is largely independent of that helpful adjunct of civilization—the middleman. Except for meat in the capital and a few of the large cities, your cook buys your food from hands only once removed from the producer. The system of food handling in Mexico City is typical of the entire country. Most

of the vegetables are raised on the so-called "floating gardens" along the Viga Canal, southwest of the city. This canal, once a part of the drainage system of Mexico, is about five miles long, and along its edges, joined to the main stream by narrow canals, are many acres of little gardens, heavily fertilized, where corn and beans, squash, onions, *chiles*, and acres of poppies, pansies, and other flowers are raised together. These little farms are owned or rented by native Indians, the most picturesque inhabitants of the Valley of Mexico, and, incidentally, usually the cleanest. These producers gather their crops, load them into canoes, in turn transfer the produce to large scows in the main canal, and themselves pole down to the city in the night. At the landing place, not far from the center of the capital, the produce is sold by the men who raised it directly to the market dealers.

The Viga market is the only approximation of a central wholesale market which Mexico enjoys, and prices are fixed by lively bargaining and not by any czars of distribution. The purchasers from the markets hire carts, public coaches, or human carriers to transport their new stock to the market places, where, in stalls rented from the city, they deal directly, with much vociferous bargaining, with your cook. The Viga market opens at dawn, and by seven or eight o'clock the entire shipment of the day is sold and has practically all been delivered to the market places in the center of the city. There your cook, or you yourself if you are seeking adventure, will spend a happy two hours going from

stall to stall, inquiring prices of the squatting market women or the cigarette-smoking market men, engaging in violent altercations and finally purchasing at prices which are very genuinely the result of the stable economic forces of supply and demand.

The milk supply of Mexico City is handled in only a little more complicated fashion. It is brought in from the outlying *haciendas* in great wagons and is sold at wholesale by the drivers from the farms. It is then transported to the markets or to the little stores which encircle the market plaza, and there is sold to the consumer. The ordinary Mexican milk is thin and poor, for until the last few years of Diaz, no high-grade stock was imported. In the first decade of the century some fine herds were established, and in Mexico City a limited quantity of good milk could be procured through large dairying concerns, chiefly American. Other cities were not so fortunate, but good cows thrive except in the hot country, and conditions were improving. Government inspection of milk was attempted, but no careful Mexican housewife uses milk that has not been boiled.

Meat in Mexico City and generally in each town is now all killed in the government-supervised slaughter house. There it is inspected and thence distributed to the dealers. There is some refrigeration, but practically all the meat is brought into Mexican cities on the hoof by the buyers who have purchased it in the country, and killed where it is consumed. A few years ago an American company

erected a modern slaughter house at Uruapam on the edge of the rich cattle country of Michoacan and Guerrero, and attempted to educate the Mexican people up to refrigerated meat, but this was unsuccessful, for the Mexican cook prefers fresh-killed beef, even though her master knows that the refrigerated product is tenderer and more delicious. Meat is dispensed at retail in some of the market places, but as a rule is sold in butcher shops near by. Practically none of these have refrigerators, and the meat is hung out in the open air, unscreened, and kept fresh only by the circulation of the air which enters the shops through the barred doors and windows, which are always open, night and day. The Mexican butcher is not a particularly skillful cutter of meat, and a wise cook can get the very finest cuts, with the bones removed, for almost the same price per pound that the less intelligent peon women will pay for a shank bone. The filet or tenderloin is the most esteemed portion of the beef, and is almost invariably sold separately, though, again, the unwary purchaser is just as likely to get the *faux-filet* or a carefully shaped length of the round at the price of the true filet.

The meat used in Mexico is practically none of it raised from true beef cattle. The old tradition was that only cow meat was desirable, and that even the flesh of steers (oxen are used extensively as draft animals in Mexico) was not so desirable. Bull meat is strong in flavor and very tough, and is not bought where anything else can be obtained. The animals killed in the bull fights are considered

poisoned, owing to the "heated blood" which came from the wrath which they were displaying at the time of their death. This meat is either not used at all or is given to prisoners and soldiers. No horse meat is eaten in Mexico, at least not consciously. The "lamb" is mostly goat. Pork is much esteemed, but foreigners who note that the pig is one of the chief scavengers of Mexico, do not, as a rule, eat Mexican pork, although this prejudice is probably as ungrounded as the native prejudice against the meat of the steer. The Mexican market consumes the entire animal, including lungs and entrails, for food, and at the time that an American company was in charge of the packing house in Mexico City it was found necessary to import from the United States the skins for the sausages which were made out of the renderings of the pork, because the prices paid by the natives for the entrails of the animals made it unprofitable to use the native product for sausage skins.

Poultry and fish are both popular in Mexico, although they have always been relatively expensive. Almost the only fish which is edible in Mexico is that from the deep sea, as the fresh-water streams have long since been exhausted. Fish in the interior towns, therefore, commands a price as high as or higher than meat, and is considered a special delicacy. Poultry is always bought alive at the market and is killed and dressed at home, and, as in parts of the United States, is often cooked before the animal heat has got out of the flesh.

In the tropics of Mexico there is still some wild

game, and wild turkey is sometimes to be bought in the hot-country cities, but in the centers of population game has been completely exhausted, with the single exception of wild duck. In winter the great lakes of the Valley are literally covered with these beautiful birds, who arrive with the fall and remain till their migration northward in the spring. The market prices of wild duck in Mexico are pleasingly low, but the birds are killed in ways which outrage all the instincts of the sportsman. One method is by volleys from guns set in regular batteries. Ancient weapons of every sort, and including guns made by hand from gaspipe, are used. Sometimes a particularly diabolical inventor will prepare three batteries, one of a dozen guns aimed across the level of the water, another at a slight angle, and a third at a high angle, so that after the first shot has made its kill and the other birds are rising, the second battery is fired, bringing down more, and finally the third catches most of the birds which have escaped the first two.

Another method is more picturesque and also appeals more to the economical Indian, as it costs him no investment for powder and shot. He will hollow out a pumpkin or a large squash, stick it over his head, with spaces cut for the eyes, and wade up to his neck out into a flock of ducks on the surface of the water. By great patience, and thanks to the appearance of the harmless gourd floating on the water, the Indian can often approach the flock, and as he stands among them up to his shoulders in water, his head covered by the gourd,

he can, or claims he can, take one duck at a time by its feet as it floats on the surface, drag it below the water, wring its neck, and fasten it to his belt. This, at least, is the tale which the Indians themselves tell, and although it may well be a figment of the imagination, it indicates the lengths to which the Indian will go in his efforts to acquire something without the expenditure of capital.

In general, the distribution of food in Mexico may be said to be almost archaic. During the unhappy days of revolution and under Carranza and his immediate successors this condition gave rise to the most colossal speculation in foodstuffs, beginning with the "generals" who controlled freight traffic and forced the farmers to sell their produce at a low figure, to be transported and sold for the "generals'" account at a huge profit in the cities, and extending down the line to the bandits who stole or destroyed the crops, and the town merchants and speculators who took advantage of the intermittent shortages. One of the great sources of suffering during this period was the disorganization of distribution as a result of the revolution, but the situation was only an aggravation of that which has always existed in Mexico, where the price of so staple a product as corn has in normal times often varied 500 per cent in relatively neighboring sections.

The prices of foods are discussed elsewhere.[1] They are the combined result of poor distribution and the eternal imminence of famine, a specter

[1] See part ii, chap. xi, p. 364.

which always hovers over Mexico and time and again has reduced her population to misery and destruction.[1] In part the varying food prices are due also to local conditions, for even in large towns the markets are often lacking in such staples as eggs or even beans and corn. This seems traceable to the custom of the Indian and peon producers, who send their goods to market only when they need money, while even the *hacendados* are often more likely to consult their own convenience in such matters than to follow even the demands of a rising market.

Wordy battles have been waged by experts and by amateurs over the nutritive value of the Mexican diet. Doing heavy work, the peon can get along perfectly well on beans and *tortillas*, with meat, either fresh or dried, only once a week. The allowance on the most successful plantations has seldom included anything besides beans, corn, coffee, sugar, and lard, with meat once or twice a week to the extent of half a pound or less per person. Men of the middle and upper classes, moreover, have mental distractions and some physical exercise which helps with the assimilation of their heavy diet.

On the other hand, Mexican women and children are notoriously unhealthy. Those of the upper classes overeat not only of their exceptionally clogging diet, but also in the matter of sweets, so that they often grow fat or sallow in early maturity.

[1] See part ii, chap. i, pp. 148–151, for discussion of this result of Mexico's climatic conditions.

The lack of fruits and green vegetables seems to be very evident here, and the absence of variety in food may be largely responsible for the poor health of the women.

Much of the heavy infant mortality is so obviously due to the habits of eating allowed and encouraged in children that it need only be mentioned here. The low-class Mexican mother thinks that her child can eat a thick, greasy soup with *tortillas* cut up in it as soon as he is taken from the breast, or before, and, indeed, gives him a *tortilla* or a stick of sugar cane to assist him in teething. The young Mexican child early begins to eat hot *chiles*, with effects on his digestive tract which can be understood by any foreigner who has suffered from this violent and unaccustomed stimulant.

It seems more likely that the undernourishment of the adult Mexican of the lower class is due to actual lack of a sufficient quantity of food. It may be that the continued excessive use of hot *chiles* and of liquor have deadened the nerves of the stomach so that need of food is not indicated promptly by a sense of hunger, or that the *chiles* themselves create a feeling of temporary satisfaction on an incompletely nourishing meal rather than merely stimulating the formation of the gastric juices and the appetite, as they are supposed to do, or that the continued use of *chiles* may have reduced the individual's digestive vitality so that he does not get the full food value from what he does eat.

However, the simpler explanation is that the

native apathy makes the peon a very poor provider, for there is real ground for the tradition that he will not work except when he actually needs food. Undoubtedly, in the face of famine or a scarcity of food within the family's reach, the Mexican peons, men, women, and children, accept what seems to them the inevitable with a stolidity which is exasperating, to say the least, to the more enterprising white men. If he is given food he eats it with avidity, and on the plantations where rations are given him and he is not required to provide them, the quality of his work and his morale are always excellent. One report regarding Mexican labor on American railways says that they "live on very little when they draw rations, but demand a liberal diet (usually including fresh meat) when boarded. . . . Contractors and foremen find the efficiency of Mexican laborers so much greater when boarded that it pays to give them regular meals instead of rations, even though higher wages must be paid to compensate them for the increased cost of living." [1]

Similar conditions are found by careful students of Mexican efficiency in Mexico itself. One American employer of Mexican labor reports receiving a gang of workmen who seemed to be perfectly well, but were apathetic, and giving them all the coffee they could drink, and all the beans and *tortillas* they could eat. They literally gorged themselves at first, showing a desire for nourishment which was

[1] Victor S. Clark, "Mexican Labor in the United States" in *Bulletin of the Bureau of Labor*, No. 78, p. 480.

astonishing and somewhat unexpected even by the experienced employer. He kept them well fed for many weeks, and made it a rule to weigh them at intervals, noting with considerable pleasure that his generosity was improving their health and, as he figured it, bringing him in definite returns in increased production. An amusing corollary to the story is that the Indians, although getting more to eat than they had ever had in their lives, and working under excellent conditions, contrived to start a first-class strike on the place, and it was finally discovered that the only complaint was that they objected to being "weighed like pigs."

The Mexican diet of corn, beans, and fat is generally approved by dieticians, and practical support of their theories is lent by the fact that the country peons who get little liquor, but eat their regular corn, beans, and fats, even without meat, rarely have digestive disorders, but that these are common to the city dwellers, who can satisfy their appetite for hot, greasy masses of food which they find cooked up and sold to them in the *fondas* and on the streets—concocted of one knows not what forms of decaying vegetable and animal matter, covered with the hot, spicy gravy. The greater ease with which liquor is obtained in the cities should not be lost sight of in this connection.

Some observers of Mexican life find their text for dissertations on Mexican malnutrition in the fact that the Mexican eats rather strange, and to other races unpalatable, foods. The fact that he enjoys the large white grub which lives in the maguey

plant when this worm is cooked in boiling fat, the fact that he relishes the insect or fish eggs which are dragged from the bottom of lakes and that he will eat iguana or lizard and even monkey meat with relish, are all taken as indications of the hunger which once assailed the natives, for, as one observer put it, "this perversion of the natural appetite can have originated only in the torturing pangs of an acute hunger."

Summing up the dietary situation in Mexico, we find that the foods most craved by the Mexican are extremely heavy, although they are well balanced as to nourishing properties, corn and beans and fat supplying practically all the needs of the human body. There is a climatic uniformity in the appetite for this type of food, for the diet of the upper classes shows that they enjoy foods which are more delicate in flavor, but which have much the same properties and proportions as the diet of the Indians and peons. We find that the same diet is eaten by both men and women and, unfortunately, by the children also; that the effect upon the men is satisfactory, particularly so far as they are engaged in labor, but that the women are either subject to diseases of the digestive tract or are overfed with sweets, unhealthily fat, and prematurely aged. The heavy infant mortality in Mexico is undoubtedly due in part to the injurious feeding of this same heavy diet to infants and children, but although there has been some marked improvement in the matter of child mortality where American companies or doctors have changed the chil-

dren's diet, even this extensive indication of the unsuitability of the Mexican dietary for certain members of her population is less of a criticism of the diet itself than of the intelligence of the mothers.

That Mexicans are often undernourished seems recognized, however, and this undernourishment seems traceable more to digestive disorders resulting from the excessive use of the stimulants of *chile* and liquor than to the food itself, although the poverty and apathy of the lower classes and the cruelty of a climate which makes food raising difficult have had much to do with the natives' not getting enough of the foods which they naturally crave.

VIII

CLOTHING

THOSE who seek to find in Mexico signs of an identification with modern culture encounter but cold comfort in the native standards of dress. The Mexican male, like a true barbarian, is the bird of gaudy plumage, and the female a modest brown sparrow—the nest builder, the worker, the squaw. As in every country where an indigenous population supports upper classes of more or less international culture, the country's sartorial peculiarities are, however, found only below the upper strata of society. Wherever the national dress is worn by the upper classes it is with much the attitude of European aristocrats when, at certain festivals, they put on the hereditary dress of the peasants. In the colonial period, and into the days of General Diaz, the sons of high-class families did often appear in the *charro* costume of silver-trimmed doeskin, with tinseled hat, peaked and broad-brimmed, and the brilliant colored *zerape*. This was, of course, not their usual attire, but they wore it as youthful California millionaires will appear from time to time in chaps, flannel shirt, and bandanna.

When one thinks of the Mexican one invariably pictures this *charro* costume. It was originally worn by the cowboys, but later developed as typical of the Mexican countryman, and was perpetuated in the official use of the *rurales*, or Federal police. The most typical feature of the *charro* outfit is the great *sombrero*, or hat, made of heavy felt, black, brown, or gray, with a peaked crown twelve to fourteen inches high, and a broadly curving brim eight to ten inches wide, embroidered in gilt or silver tinsel. The coat is a short bolero jacket extending only to the waist, and usually embroidered in tinsel. A soft shirt, loose about the neck, is fastened with a bright necktie. The trousers, supported on the hips by a brilliant-hued twisted sash, are of the same material as the coat, fitting as tightly as is physically possible, flaring slightly at the bottom, where they are buttoned skin-tight for about ten inches above the pointed leather shoes. The trousers are trimmed with silver braid and have silver buttons along the sides, the buttons at the waist and at the bottom of the leg being of use, the rest purely ornamental. In material the suit was, in its perfectly typical form, of soft-tanned leather, gray or brown, and elaborately embroidered, the gray in silver and the brown in gold. The leather was in later years substituted by fine or heavy cloth, and some variety in color was brought in, even white being affected by the dandies when they rode out on horseback on their elaborately tooled and silver-studded saddles.

This costume is to be found all over Mexico to-

day among the *ranchero* class, the most typical of the mestizo groups. It remains the Mexican national costume, but as time has passed fewer and fewer of the Mexicans use it. Twenty years ago in Mexico City every driver of a public carriage wore a broad-brimmed felt *sombrero*, but to-day one would have difficulty in finding one in the capital. In those days the coachmen in the cities, and others belonging to their class in the towns, wore short bolero jackets and tight trousers, untrimmed. Now, with the advance of American and, later, Mexican ready-made clothes of European type, this survival has passed. The Mexican national costume is becoming largely a tradition in the cities, but a tradition which, happily for the picturesque side of Mexico, still finds expression in the countryside.

While for many generations the Mexican man had this national dress, the woman of similar class was garbed with a drab sameness which, though it marked her social status, still lacked almost everything that was at all picturesque. Her dresses were, and still are, long and flaring, made usually of a cotton print, and almost untrimmed. Only the headdress could be said to be typical—a scarf of black merino, in the class corresponding to the men who wear the *charro* costume, and in the lower classes the *reboso* of a soft blue color which has been Mexican for centuries.

If the so-called Mexican dress has been disappearing of late years, the clothing of the peon and of the Indian has remained almost unchanged since

early days. This consists of a hat of plaited straw, the crown round and low, the big brim curving upward practically to the height of the crown, a collarless shirt, white *manta* (the coarse native muslin) pantaloons of the general cut of pajama trousers, held in place by a scarf of red cotton wound round and round the waist, with the ends tucked in, and the feet in sandals of the simplest pattern. The costume is completed by a *zerape* of wool about the size of the blanket of a single bed, folded twice lengthwise, and carried over the left shoulder during the day, and at night, or when it is cold, wrapped about the shoulders, covering mouth and nose as well. Sometimes there is a coat of white cotton, but this is found only in the tropics, where the *zerape* is not always carried. The trousers, when long, are usually so wide that, as they flap, it seems that they touch both toe and heel. Sometimes, however, they are cut short at the knee, and usually when the peon is at work the wide trousers are rolled up until the full leg is bare.

The peon women dress in dark cotton, the waist being almost invariably covered by the *reboso*, which is used as a sling for carrying the inevitable baby, perched behind or on the left arm. The long black hair of these women is plaited with strips of red cotton cloth or tape, usually two braids hanging down the back. They seldom wear sandals except when on long marches, often going barefoot even in the city streets.

Although the Spaniards introduced pantaloons and shirt, the dress of the ancient inhabitants of

Mexico seems to have had a part in the origin of the typical costume of the lower classes of to-day. The earliest forms of dress were, of course, of dried skins, these being displaced as time went on by tanned and prepared leather, cut and sewed, and then by cloth made of maguey and palm fiber. The Aztec and related tribes were wearing cotton when the Spaniards came, the fineness of some of that used by the nobles being remarked by the conquerors.

The costume of the Aztec men consisted of two garments, one the *maxtli* (breech cloth is our only approximation), which, in the highest classes, was twenty-four feet long and nine inches wide, so that dressing was no minor operation. The other garment was the *timatli*, or mantle, the precursor of the modern *zerape*, a four-foot square of cotton or fiber, worn with two corners knotted or clasped on breast or shoulder.

The Indian women wore a short chemise, or *huipil*, reaching barely to the waist, and a *cuetil*, or skirt, tight fitting, of cotton or other fabric, reaching to halfway between knees and ankles. Sometimes additional overdresses similar to the *huipil*, but longer, were worn, ornamented with fringes and tassels. All of these garments, including the men's breech cloths, were often embroidered and tinted elaborately, according to the purse of the wearer. The dress of the nobles differed from that of the peasants only in quality and ornamentation.

Survivals of some of these costumes persist, those of the ancient-lineaged Otomis being probably the purest, the women to-day wearing garments like

those just described, and, rarely, the older men a wide breech cloth and diminutive *zerape* with a slit in the middle, so that it is worn over the head, its width hardly passing the shoulders, its length little more than to the waist in front and back, or sometimes sewed into half sleeves, the long ends belted in at the waist.

To describe the Mexican of to-day, we find that the social significance of his costume begins with his hat and ends only with his shoes. The peon's coarse, plaited, round-crowned head covering evolves, when he becomes a free laborer, into a high-peaked straw or felt *sombrero*, increasing in elaborateness as his purse allows. His hat is truly his pride, the mark of his grandeur and the expression of his self-esteem. A miner stripped to a breech cloth will still appear with a great peaked hat in which he carries his cigarettes and his matches, his lunch, and even his money, and which serves as well for a protection against falling stones when he is working underground. The city and farm laborer may not have such a fancy hat, but it is usually peaked, and therein he also carries most of his belongings, even down to a few *tortillas* and a piece of meat. When, in climbing the social scale, the peaked *sombrero* disappears, it is replaced by a thick, broad felt hat which may have been designed by American manufacturers for their Western trade thirty years ago, but which has now assumed a form and use which are essentially Mexican. Above this plane the derby, the panama, and the convenient straw hat of American manufacture eliminate the dis-

tinctions in male headgear, but it is difficult to wean even the most modernized mestizo away from his ponderous and depressing black felt hat with its heavy wide brim and its thick crown.

The outer covering of the Mexican is typified by the *zerape*, whose manufacture developed one of the most interesting phases of the native crafts, the weaving of fine and beautiful fabrics on the hand loom. In the early days the *zerapes* of Zacatecas and Saltillo were famous for their fineness, for their designs and color, and for their impermeability to water. To-day one will find but few of these ancient *zerapes*, in many cases even the designs having been abandoned in the wholesale manufacture of blankets patterned on European steamer rugs, and still more often on the American Indian's machine-made red blanket decorated only with a pair of black bars at either end. The beautiful hand-woven *zerapes* are still worn and prized, however, by those who affect the *charro* costume. Even when one reaches the plane where the black felt hat first appears, the *zerape* is still found as the overcoat, though by this time it has become sobered to a dull gray or dark blue, reminiscent of the shawls of the Victorian era.

As a wrap, the *zerape* is swung about the shoulders, muffling the face, an adaptation doubtless made from the Spanish cloak, the trick of swinging it so that it will stay without holding being attained only after long practice. Only the shoulders and face are covered, and on a chilly day, or even while sleeping on a night which is none too warm, the

peon swathes his head in his *zerape*, while his bare legs are freely and unfeelingly exposed to the weather.

The suits of the Mexican men in the upper classes follow the styles of London and New York. They are usually made by native tailors, although ready-made suits have been imported from the United States, and are made by some concerns in Mexico itself. In the time of General Diaz, however, European woolens paid comparatively low duty and labor was cheap, so that tailored clothing was more economical than any that could be imported from the United States. The advantages of style and cut are with the imported ready-made suits, however, for the Mexican tailor, working on his fine European fabrics, usually produces a botch of bunched-up material without finish or style.

As we go down the social scale the coat becomes shorter, approaching the traditional bolero type, and the waistcoat becomes a purely utilitarian garment. The Mexican tailor, in fact, is very likely to make the trousers extremely high-waisted, with the idea of displacing the waistcoat by the wide belt of the trousers—a Spanish adaptation. The trousers are often made tight across the hips, even though they may be straight instead of tight-fitting below. The tight-fitting trousers are, however, still popular with the artisans and with the town Indians, whom local ordinances now usually require to appear in trousers instead of white pantaloons.

The city ordinances referred to were passed with

the idea that the sensible and convenient white cotton "pajamas" were not decent, but the foreigner contemplates with something of repugnance the spectacle of the clean Indian passing through the city streets in a pair of tight-fitting trousers which he has rented in one of the suburbs and which he will return, to be used by another, when he leaves the town.

The foot covering of the Mexican runs from nothing but his own calloused skin to imported American shoes. The Mexican sandal is of very simple design, the thong of rawhide being attached to four wire staples at the sides of the thick leather sole. The thong does not pass between the toes, and the sandal, or *guaracha*, is in reality little more than a piece of leather or woven fiber fastened to the bottom of the foot by leather strips passing over the instep and around the heel. Most of the shoes worn in Mexico are imported, but the Mexicans have manufactured small quantities of shoes for many years, chiefly from the poorly tanned and ill-smelling native leather. The typical native shoe is long and pointed, without a tip, and usually with elastics in the sides.

The costumes of the women follow similar caste lines. The upper classes wear French hats, and differ from the customs of other communities largely in the wearing of rather more elaborate headgear for ordinary occasions than would be chosen by the European or American woman. The use of hats now extends quite far down the scale. The Mexican lady wears the Spanish lace

head covering (the *mantilla* and the *Sevillana*) only upon special occasions, although in the colonial period they were the proper and expected style. The *mantilla*, for instance, is worn on certain ceremonial days of worship in the Church, notably Good Friday, but the *Sevillana*, a suitable covering for the elaborate feminine coiffure, is now almost unknown except as an evening scarf. The Mexican lady, when she drives, now wears a European hat, where fifty years ago the women of her class appeared with an elaborate coiffure and the light lace *Sevillana* as its covering.

The *mantilla* is a scarf three or four yards long, and at most one yard wide, of black or white silk or linen lace. When worn, formally, it is gathered in at the top and fastened to the hair. The *Sevillana* is a much lighter and smaller piece of lace, also black or white, a yard or little more in length, and diamond shaped, so that the top of the head is covered and the tapering ends fall gracefully over the shoulders. The ends of the *mantilla* are folded loosely about the neck, but the *Sevillana* often hangs undraped.

The use of hats has, with Mexican ladies, practically replaced the beautiful laces, but the black merino scarf is still the sign of the lower middle-class woman, the wife of the artisan and clerk. This is worn folded about the head tightly and wrapped about the neck, a style suggestive of the East. The blue *reboso* of the lower-class women is much longer than the black merino scarf, and in shape is very much like the *mantilla*, which, how-

ever, it does not approximate in any other way. There is a typical weave of this garment which alternates white and blue threads and gives a pale tone to a fabric which is, in reality, dark and substantial. The *reboso* is made of cotton, but it is also manufactured in its typical pattern in silk, in which form it is used by upper-class women as a very convenient shoulder wrap. The peon woman wears it almost invariably over the head, and at the same time as a sling for the baby, or even for the day's purchases at the market.

The dress of Mexican women of the upper classes is of Parisian manufacture or pattern. Most of the gowns that are not imported from abroad are manufactured at home, the convent-trained Mexican woman being always skillful with the needle. Paper patterns, both French and American, are used extensively. The materials are mostly imported, although some finer grades of cotton goods are made in Mexico.

The middle-class women of Mexico dress with some semblance of European style, but in fashions which have almost been forgotten in other lands. The dresses are long, the skirts gored, and the bodice assumes the frumpy appearance suggestive of outworn styles. As we go down the scale, however, the outer dresses take even more rigid traditional form in calico of dark hues, cut straight and very long, often dragging on the ground. Here the headgear is the blue *reboso,* and shoes are worn, usually without stockings. Corsets and most lingerie have disappeared. The peon women dress in

various grades from the calico of the workman's wife down to the rags of the beggars.

In the Indian tribes which still retain their ancient customs of dress it is sometimes the women who are more distinctive, as white *manta* is almost universal as a dress for the Indian man. The mountain Indians about Mexico City and Guanajuato, chiefly of the Otomi race, come down to the cities and villages to market, the men dressed in white, the women sometimes in dark-colored woolen skirts drawn tightly about their waists and extending a little below the knees, the upper part of their bodies covered with the ancient type of jacket, sometimes of wool, sometimes of cotton, without sleeves, and not fastened to the skirt.

The Indian women of other tribes also have their typical dress, the most notable being those of the Tehuantepec, famous for their beauty and for the beauty and elaborateness of their costume. The waist is of fine cotton, embroidered in bright colors, and itself of beautiful shades ranging from rich purple to pale yellow. This hangs loosely from the shoulders, and misses the skirt by a wide space of fair brown flesh. On feast days it is almost covered by an elaborate headdress, which, when worn to church or at festivals, surrounds the face with an oval of starched white rays eight to ten inches long. The Tehuana women adorn themselves with great chains made of gold coins ranging from the American double eagle ($20) through the Mexican *azteca* (twenty pesos) down to the tiny American one-dollar gold pieces.

The use of underclothing in Mexico is confined very largely to the upper classes, but the women even lower in the scale wear chemises, even though they do not ordinarily wear stockings. Indeed, a dark calico chemise is a universal garment of low-class Mexican women, being used as an undergarment in the daytime, as a nightdress for sleeping, and as a suit for outdoor bathing, the body and the chemise being washed together in the streams.

The shoes of Mexico have not a little social importance. It is said that in the formation of an early Mexico City directory those who wore shoes were all mentioned, but none others appeared, and there has always been a very easy distinction between those who wear sandals and those who wear shoes, a distinction analogous to that between the women who wear hats and those who wear only scarfs over their heads.

Cosmetics and perfumes are in very general use throughout all classes in Mexico, even peon women finding great pleasure in the possession and use of strong-smelling extracts. Perfume is expensive, the price of the native product being regulated by the cost of the imported article, on which a heavy duty has always been levied. Mexican women have always used a great deal of powder, the tradition being that powder forms a protection against the tropical sun and dry winds. Creams and other cosmetics are used extensively, also in an effort to counteract this influence. Some rouge is used by Mexican women, but as a rule the complexion most esteemed is the pasty white, which is achieved

by the use of vast quantities of face powder, often plastered over a coating of glycerine or cosmetic cream, to make it stick.

The Mexican woman appreciates adornment, and jewelry has always been used generously in the republic. The national desire for show has led to the importation of second-grade stones, which are manufactured into elaborate "sunbursts," necklaces, earrings, bracelets, etc. Jewelry in Mexico is bought for display, and the American conception of it as an investment, which has made the market for fine stones so much better than that for second-grade, is seldom considered in Mexico. Many peculiar styles of adornment, such as the great Spanish combs of carved tortoise shell and jeweled work, have always been appreciated in Mexico. They formed an indispensable part of the dress typical of an earlier day, and are far from absent in the elaborate coiffures which many Mexican ladies and all the women of the upper middle class assume for festivals and balls.

Mexican children follow, in dress, the garb of their parents, and the peon boy is a miniature, in his diminutive peaked hat and his tiny *zerape*, of his own father, and the little peon girl, save for the shortness of her dresses and her frank and obvious addiction to the one-piece garment, an image of her mother. In the upper ranks, the boys are dressed as the French and Spanish youths of their class, and the girls are starched and helpless in lace and frilled and beribboned dresses, topped by coiffures as elaborate, if not so high, as those of their

mothers and grown sisters. Mexican babies of the upper classes are dressed in long and lacy gowns, and the panorama of a Mexican family out for a walk is invariably guarded in the rear by a dusky, dull-dressed and not always clean nursemaid, her unwashed *reboso* swung about the baby, but *underneath* the flowing white gown, so that all the beauties of the garment are displayed for the admiration of the passing throng.

IX

CLEANLINESS AND SANITATION

THE casual commentator usually overemphasizes the uncleanliness of the mass of the Mexican people. So far as uncleanliness is common, however, it may be traced largely to the very great proportion of extremely poor people; poverty and filth everywhere go hand in hand. The Mexican of the upper classes is quite as clean as the American or Englishman, and not until we reach the lower Mexican types do we find the picturesque group who traditionally and literally bathe their bodies only on the annual festival of St. John the Baptist.

By the usually invariable test of odor, most Mexican crowds average well, excepting in the case of the low-caste *leperos*, who wash neither bodies nor clothes. This is probably due to the relative cleanliness of the outer raiment, for the traditions of the Mexican peasantry seem to tend toward a busy washing of the clothing rather than to meticulous cleanliness of the body.

The laundry customs of Mexico are picturesque and far from inefficient. Soap is expensive, and even the native product, which is almost useless for

cleansing, commands a high price. The peon woman will, therefore, scrub for hours in a stream with little or no soap, and with the sun as her only aid in bleaching. The typical Mexican laundry is located on a river bank and consists of a few flat, smooth stones sloping toward the stream, with a tin cup or gourd for scooping the water up to splash over the clothes. Here the women kneel to their work, and so deep rooted is custom that the usual modern municipal laundry is a shed by the side of a stream, with running water diverted into a channel running between sloping slabs of cement, where the women kneel at their scrubbing as they have done for generations. The clothes are not rubbed over the stones or cement or over anything that corresponds to the American washboard, the cloth being pulled together and rolled between the hands and the stone, with a peculiar motion which only a Mexican laundress can achieve, and which does not rasp or wear the fabric. The process, if combined with plenty of soap and the drying under the sun on the grass, results in a whiteness and sweetness which are always reassuring. Where, however, the limitations of poverty prevent the use of soap, the clothing, even when thoroughly washed, is gray and dingy.

Mexican servants are efficient with the flat iron, which they heat, evenly and cleanly, over charcoal, and garments return in beautiful condition. It may be mentioned, however, that even in a family of two or three, one woman is assigned to the laundry work alone, and spends the entire week over it.

The Mexican laundress is a happy soul, and gossips and jokes with her friends while she scrubs and keeps an eye upon her children paddling in the stream. Incidentally, she washes her long black hair, even though she may fail to wash her body. This has always impressed the visitor from abroad as a sign of the cleanliness of the Mexican women, but if they themselves are questioned they are usually quite frank in saying that they wash their hair often because it discourages vermin.

For the Mexican peon, male or female, uses water only "when needed." This carries no especial reflection on Mexico, but it does classify the peon with some exactness. The North American Indian has never been a model of cleanliness, nor has the Chinese coolie, and the Mexican peon seems to fall into their group. Below the very highest classes bathing is not a daily, nor even a weekly, habit. In the tropics, one bathes to keep cool, and the tropical Indian is, as a rule, much cleaner than his cousin on the plateau. Habit and tradition have affected this custom considerably, however, for the filth among the hot-country contract laborers from the plateau towns is always in striking contrast to the clean native Indians who work with them. On the plateau, where the body seldom sweats except under exertion, the need of bathing does not force itself through any bodily discomfort, and it is probably literally true that in the lower strata no complete baths are taken at all, excepting on St. John's Day, June 24th. The peon, therefore, goes about in his filthy

rags and with dirt caked on his calloused feet until that wisely emphasized churchly festival or until a policeman drags him, protesting loudly, off to a public bathhouse. This latter function of authority is exercised, from time to time, during typhus and other epidemics, when policemen spend their days picking out the filthiest from groups of workmen, taking them to public baths, and there sternly superintending their ablutions and the washing of their clothes. Public bathhouses have been established in Mexico City and in other plateau towns for many years, and under the Diaz rule the number of these places kept well ahead of the demand, although on festival days and Sundays they were often crowded.

While the peon of the plateau may be frankly dirty, the mestizo Mexican who has risen from clean *manta* shirt and pantaloons to woolen raiment which is never washed, is very likely to be far less attractive from the point of view of cleanliness. The psychology of this type of Mexican seems to overemphasize the value of the outward appearance as against the inward virtue, and the clerk class in Mexico, with their more or less clean collars, too often wear a very dirty shirt that suggests underclothing that is even less fresh. The problem of cleanliness in Mexico is rather one of educating the native to desire it than of making him clean with the sweet conviction that cleanliness will lead him closer to godliness.

The private bathroom is yet to achieve the glory of common use in Mexico. Except for dwellers in

the most modern houses, it is the "bathhouse" to which a Mexican repairs daily (or less often) for his "scrub." These bathhouses (of which there are a large number in all cities) maintain a certain standard of cleanliness and sanitation, with considerable luxury where the prices justify it. Music is often played in the patio, and the bathers—the men and women in separate sections—sit in the corridors, visiting and taking refreshments. The baths are of various sorts, tub, shower, and Turkish, with relatively modern equipment. The bathhouse usually furnishes towels, soap, and the little twist of vegetable fiber which the Mexican has come to use as a scrub brush. The dressing rooms, equipped with brush and comb, also furnish a tiny vial of grease or oil for the hair.

Outside of Mexico City most of the bathhouses were built many years ago, although there are some with modern improvements. The really typical Mexican baths are, however, in towns where there are natural hot springs. They consist of many rooms with Roman baths almost large enough to swim in, and filled with running water of varying temperatures. The baths at Aguas Calientes, for instance, have a series of rooms with the degree of temperature marked over the door, the water coming from hot and cold springs in the immediate vicinity. Here is genuine luxury, and the water, continually running, is like blue crystal. Attendants furnish towels, and soap and the twist of fiber in a tin dish which floats on the water. The traveler in Mexico who has enjoyed even one of

these beautifully luxurious baths, with its thoughtful attendance and the half hour's rest, wrapped in his sheet in a steamer chair or on a cot, soothed with a Mexican cigarette and a glass of Spanish sherry, must go far beyond the dictates of his heart to enter into any great diatribes upon the bathing facilities of Mexico.

Household cleanliness is, like bathing, largely a matter of class, but the conscientious Mexican housewife, whether she be American, English, or native, has almost insuperable difficulties in convincing her low-class servants of the value and importance of true cleanliness. As a rule, when it is attained in any degree it is almost solely through the exercise of authority, and not through any successful assault upon the peon philosophy.

Vermin, the inevitable accompaniment and index of filth, are common in Mexico. Bedbugs are almost universal, and infest clothing as well as beds. Cockroaches swarm throughout the Mexican house of high or low degree—cockroaches of every size and color, from the elephantine type nearly two inches long, to the smallest and busiest denizen of the kitchen. There is a tradition that the cockroach wages war upon the bedbug, and as the cockroach does not bite and is easily large enough to be extracted from the cooking if he falls in, he is allowed free range of the house in the fond illusion that his presence keeps down the population of the ubiquitous *chinches*, or bedbugs. Rats and mice are comparatively rare, due, perhaps, to the custom of keeping very little food in the house.

Fleas are everywhere, especially during the dry season, when the dusty roads and even the dust of the churches are infested with them, the Mexican flea being impersonal in his attentions to animals and humans. Head lice are almost universal with the lower classes, body lice infest their garments, and both species roam the prisons and public places where the peons forgather. One of the common sights on the Mexican highways is the pleasant social scene of a mother, with her children about her, picking the lice from their heads, for all the world like a family of monkeys in a zoo.

The age-old battle of the careful housewife against vermin thus is often a losing one in Mexico. Sunlight, in the typical Mexican house, almost never reaches into the rooms, and the traditions of household sanitation are extremely primitive. The custom of garbage disposal is either to burn it in more or less malodorous ovens in the patio or the rear of the house, or to throw it in heaps, where it lies for days, and sometimes weeks, until it is carried away by men hired by the householder, or, very seldom, by the city. In villages, garbage and refuse are thrown on the ground, and practically no care is taken except to have the dump as far as practicable from the house.

Most Mexican kitchens in the better type of houses have running water, and there is running water in the patios and in bathrooms when such exist, but there is seldom, if ever, water in the bedrooms, and usually no stationary washstands in the bathrooms. Waterclosets are still com-

paratively rare in Mexico, and one of the classic stories has to do with an old-fashioned *hacendado* who had a modern watercloset erected in the patio of his house, where it was shown to visitors as one of the curiosities of his establishment.

The whole subject of sanitation, in home and community, is complicated by the dead weight of ignorance and tradition on the mass of the people. The only government in Mexico which has ever taken a firm grip on the problem of sanitation was that of General Diaz, which accomplished tremendous things in the way of public works and yet was baffled eternally in its attempt to make these works useful and to extend their functions down to the life of the individual. His Federal expenditure totaled about P46,000,000 for major works of sanitation and water supply in the capital and ports, this including nearly P30,000,000 for drainage and water supply of the capital, P4,000,000 for Vera Cruz, etc. All this is exclusive of improvements which had been made by the municipalities and states outside of the Federal jurisdiction.

As a rule, the water supply of Mexican cities is now fairly pure. This is due alone to the measures which were introduced by the Diaz government. There has also been a very considerable development of sewerage systems of a modern type, all of them works of considerable cost. Usually these were carried out by foreign contracting companies and engineers, although many able Mexican sanitary engineers took an active and commendable part in their construction.

CLEANLINESS AND SANITATION

Previous to the modern sanitation introduced by Diaz, the water of Mexican towns was almost invariably brought through open gravity aqueducts, some of which came for considerable distances, the great arched conduits being landmarks of almost every Mexican city, and monuments to the engineering enterprise of Aztec and Spaniard. Water from these gravity aqueducts was usually piped only to fountains in the centers of the cities, and from there was carried to the houses by the women or by public water carriers in great earthen jars or leather bags. The sewage and refuse disposal was accomplished through the gutters which ran down the centers of the cobblestone-paved streets, and buzzards and pigs were the most important workers in the Mexican sanitary system. Through the efficiency of the Diaz government and its able engineers, both native and foreign, these picturesque features of Mexican community life have almost disappeared and are to be found to-day only in the most backward of outlying villages and towns.

Since the fall of Diaz sanitary conditions in Mexican cities have greatly deteriorated, but the basic foundation of efficient sewer systems and water supply remain. The greatest difficulty in enforcing sanitation in Mexico is the apathy of the people, who have always found sanitary regulations irksome, and whose processes of mind and habits make it difficult to induce them to use the public conveniences except under the pressure of law and the police. The closing of public wells in most Mexican cities has, of course, been possible without

great difficulty, but it has been less easy to stop soil contamination.

In the ordinary Indian village there are no toilet arrangements and the condition of filth even around the houses and in public squares continues to menace the community health. Even where conveniences are established their drainage is often unprovided for and there is little or no attempt to keep the water supply pure, the same streams being used for both water and drainage, and for bathing into the bargain. Like most of the problems of Mexico, the full achievement of municipal sanitation waits upon education, the training of the Indian up to desiring the more sanitary and comfortable provisions of modern community organization.

The difficulties of the higher officials of the Diaz government in bringing their ideas into realization have been aggravated by their inability to get efficient personnel in the lower offices, either in trained men or conscientious workers. In addition, in the states the commissions of public health have had little power and less ambition, and, as a rule, almost no funds. The few really conscientious and intelligent physicians and sanitary experts who have worked in Mexico have told of the most discouraging lack of support from the municipalities. Careful regulations are made out in the capital and distributed throughout the country, but no one enforces them, and open cesspools, sewers without disinfection, piles of rubbish, and pools of dirty water mark every Mexican community, from the best to the worst.

All of this has been substantiated by the reports of the United States Army and American Red Cross officials of the clean-up which was accomplished in the city of Vera Cruz during its occupation by United States troops in 1914. Under the direction of American doctors Vera Cruz was cleaned up in about one month. Defiled wells were sealed or filled up, stagnant pools drained off or covered with oil, swamps filled in, etc. The American soldiers found wagon loads of garbage in corners and passages of public restaurants, piles of garbage drying in the patios, and thousands of breeding places for flies and vermin which had apparently been untouched for years. These were carried off and destroyed, three collections of garbage made daily, and a complete inspection of the city directed toward the maintenance of rigid sanitary regulations. The reports on these matters[1] show that when the American troops occupied Vera Cruz the town was infested with flies, so that, as one writer put it, "it was difficult to tell which was food and which was flies," but at the end of a single month the conditions were so improved that there were practically no flies in streets, restaurants, or private houses, and even the market places were largely relieved of the pests.

The burial methods in Mexican communities have been the subject of picturesque discussion and of the diatribes of sanitary experts. The rented coffin and shroud, the lack of embalming, the open funeral cars, and the rented graves come in for

[1] Charles Jenkinson in *The Survey*, vol. xxiii, no. 6.

severe criticism. This is all deserved, for the customs are but part and parcel of the appalling absence of the ideals of municipal cleanliness.

The Mexican cemetery is usually located within the city limits, and although burials in churches have been prohibited for some years, the cemeteries, occupying a comparatively limited section of ground, are located on hills or slopes, so as to be, as a rule, a real menace to the public health. This is increased by the fact that the graves are rented for periods of from one to seven years, and when emptied after these burial periods, the space is immediately used again, and the defilement of the soil is continuous. The custom of renting the coffin and the shroud is, of course, hopelessly perilous to public health, but it is continued generally among the lower classes. Embalming is practiced to a certain extent, but the Mexican law requires that a licensed physician perform this operation, and it is extremely expensive, and in some cases is most inadequate. The general law in Mexico is that a body must be buried within twenty-four hours after death, and this is usually followed. There is very little shipping of remains from town to town, for where this is done the law requires that they be embalmed and that a metal casket be used.

All this is indicative of the fact (which becomes more and more emphasized as one goes deeper into the study of living conditions) that it is the psychological attitude of the people which is the root of most of the evils of the country. Mexicans are

dirty, are careless with sanitation, solely because they do not consider it worth while to put forward the effort which a correction of these conditions demands. In essence there is little in these phases of Mexican life which is different from what may be seen in almost any country in the world, but Mexico's conditions are aggravated by the fact that the traditions upon which her people act are deeply rooted in race and confined within the barriers of extreme poverty. In more enlightened communities the people can be educated, or can be stirred by published warnings of epidemics, while in Mexico the masses cannot read and their apathy baffles almost all teaching and warning. It is for this reason, and probably for this reason alone, that the Mexican uncleanliness, lack of sanitation, and carelessness in disease have been able to rear such a wall against improved living conditions.

The problem in this, as in so many other phases of Mexican life, lies in education, an education which seems almost hopeless of achievement in the present mass of the population, but an education which brave men in Catholic cloisters, in Protestant churches, and in government departments are facing with such courage and understanding as their own education and training will allow them. The Mexican plans seem to have failed and failed again, while American methods, and principally the American police control, were able in a few short months to accomplish wonders in the single city of Vera Cruz. How much of a reflection on Mexico this is, and how much more of a reflection it will prove as

the contrast persists through years to come, is something which can only be touched on here. Basically the American methods followed those of the Diaz government, differing only in that their imposition of change came from military control and was achieved with more persistence and energy than Diaz was ever able to summon.

The contrast, however, will long remain in the American mind, as well as in the minds of the Mexicans who looked on at Vera Cruz and now look back to the days of Diaz, as perhaps the most significant demonstration of the potency of the white man's energy and understanding in working toward the solution of Mexico's great problems.

X

THE CONDITIONS OF LABOR

IN many ways all of the chapters of this book are but discussions of the various conditions under which the Mexican finds himself a living in his native land. From another viewpoint, the labor problem, and the land problem which has so much to do with its determination, lie completely outside the scope of this work. The middle ground, however, sees the conditions under which a nation works as part of the myriad forces which determine the way in which its people live.

Of those conditions of work, a round half dozen seem to bear directly upon the study to which we have set ourselves, the unwinding of the colorful threads which form the fabric of Mexico's national life. Primarily, because Mexico is chiefly an agricultural nation, is the relation of the land question to the problem of human living.

There has never been any lack of land for the people of Mexico; the problem has been rather, as one Mexican has expressed it, "a lack of people for the land." With a population averaging eighteen to the square mile, with ten acres of nonmountain-

ous land per capita, Mexico stands out among the countries of the world for her vast tracts of undeveloped property and for the paucity of her production of the necessities of life.

Opportunity to use the tillable land has never been lacking. A capitalist, large or small, can always buy land—there is little jealous guarding of ancestral property or of all the best property, as foreign companies have proven by their purchases for many years. Good land has a market value, however, and a peculiarity of peasants with "land hunger" seems to be that they do not wish to pay the value of the real estate which whets their desire, and will not take anything less appetizing.

Even without capital, land is still obtainable in Mexico. An Indian in his communal group has from time immemorial to this day been able to obtain the use of a tract of his native village farming land—for all but a relatively small percentage of the country Indians still live under village organizations.

But even if he does not live in a communal state, there is open to the Indian, as to the mestizo peon, perhaps the most generous farming arrangement in the world, for he can go to practically any of the great *haciendas* in Mexico and arrange with the proprietor to plant, till, and harvest on shares as large a tract as he can handle of the best grade of land, with no risk to himself and with a guaranty of his livelihood in any case and of a profit in proportion to the quality of his crop.

These are the basic facts of the relationship of the worker to the land in Mexico. They go back to

certain early conditions which antedate the present era by four centuries. Before the conquest in 1521, the Indians had no private ownership, only tribal ownership, of land. The Spanish government, recognizing this system, endowed all the Indian towns with three sorts of real estate, preserving the communal idea, but giving it some legal basis. These properties, community owned, were: (1) a town site (*fundo legal*); (2) pasturage (*egidos*); and (3) commons (*tierras communales*). The town site was the square which could be inscribed in a circle with a radius of six hundred *varas* (about 2,000 feet), the center of the circle being the center, or plaza, of the town, each family having its hut and "orchard" in the village. The pasturage, or *egidos*, was a one-league square of grazing land, so that the natives "could feed their cattle," as the law expressed it. The commons, of varying size, were forest and farm lands owned by the community, and heads of families were assigned certain sections which they were to work, and they could neither sell, mortgage, nor lease it.

These Indian properties remained untouched, even after the independence from Spain, until in 1856 the Juarez government ordered the allotment of all real estate pertaining to the villages to the members of the community. This law excepted the pasturage land, or *egidos*, on the ground of public utility, and also the town sites, in view of the fact that these were already parceled out to individuals. Later, the constitution of 1857 legally prohibited the common ownership of even the *egidos*, or pas-

turages, and ordered that these also be partitioned, although, owing to the frequent revolutions, this was not carried out. After the decisive triumph of the republic, ten years passed before any attempt was made to enforce these divisions, and then, under Diaz, on account of the rapid development of the country, the government undertook to sell all the *unpossessed* lands which had been declared national property by the Constitution of 1857.

The effort to divide the *egidos* and the commons, which included the farming land, was not for the purpose of despoiling the Indians, but solely to give a definite legal basis of land ownership which would make possible the modern development of the country. This partition was finally forced by the decrees of the Diaz government, which opened these lands to denouncement, much as mining claims could be denounced, if the Indians, after the ample notice given them, did not comply with the law. This "law of survey" has been made the text for many attacks upon the Diaz government, but in essence the principle was correct and it was vitally necessary to the modern development of Mexico, as without it there would have been no definite legal basis for land transactions covering the country. There were undoubtedly many abuses in its enforcement, and unscrupulous individuals took advantage of the ignorance of the Indians to take their lands from them under this law. But there were always legal and even extralegal methods of redress, not the least being the appeals to "Don Porfirio" which were made time and

again, and were almost invariably in favor of the original Indian owners.

The origin of the great landed estates of Mexico goes back to another form of property, the royal grants of the Spanish Crown, something entirely outside the laws creating the Indian land titles just described. There were oppressions under these grants, and yet as a general rule the Indian properties, town sites, pasturages, and commons, which were inclosed in the larger grants were recognized both by the colonial government and by the *hacendados*. It was this condition that brought about the anomaly of an Indian belonging to an *hacienda*, and at the same time owning his own property within the confines of the *hacienda*, a discrepancy which was one of the reasons which made it vitally important for the Mexican government to place the ownership of the Indian lands upon a modern legal basis, submission to the laws of survey being incumbent on the *hacendados*, miners, and ranchers as well as upon the Indians.

When we pass beyond the two forms of land titles established by the Spaniards and as revised by the Mexicans after 1856, we find that the human element and not the legal system is the determining factor. This is demonstrated in the Indians' inability to adapt themselves to modern conceptions of property, with the resultant sale of their lands, when they were deprived of their communal system, to *hacendados* and to *rancheros*.

It is also manifested in the effect which Indian apathy and barbaric communism have had upon

the systems of land cultivation. The communal groups of the Indians raised only enough for themselves, and to this day the "ideal" (for such is the word the revolutionists use) of the Indian is to revive the communistic system which gives him a tiny plot of ground where, protected by the commune's food supplies, he can raise only enough corn for his own personal use. The whole history of Mexican agriculture is dominated by the virtual impossibility of inducing the available laborers to work as part of a large production scheme. The inevitable result of the refusal of the communistic Indian and the small farmer to raise a surplus, combined as the condition is with economic and transportation conditions outside the scope of this work, has been that the *hacienda* has alone produced food for the market and thus for the support of the mining and industrial community. Identified thus with the very life of Mexico, the labor problem of the *hacienda* becomes vital. Its dependence on hired help, and its need of making that help produce, are, in their turn, the economic background of the so-called peonage system.

The history of peonage goes back to the earliest days of the conquest. The first Spanish discoverers of Mexico had sailed from Havana in search of new lands from which Indian slaves could be obtained for the Cuban plantations. Some captures had been made by the earliest voyagers, and Cortez's primary object on his first trip to Mexico was undoubtedly to secure more human captives to be transported back to Cuba. The richness of the

country, however, tempted the Spaniards in other directions, and they quickly turned their attention to the capture of gold, silver, and precious stones, and the imposition of tributes which would produce this wealth.

When after the first flush of conquest they found that their dreams of gold and precious stones were not realized in any such measure as they had anticipated, their attention returned to the wealth of the country which had originally called them, that is, its human labor. In Cuba the system of *repartimientos*, or distribution of Indian laborers, was already in full swing, and the soldiers immediately demanded similar privileges in Mexico. These were granted by Cortez, and after some difficulties and correspondence were confirmed by the king of Spain. Villages and even whole tribes of Indians were given over bodily to individual Spaniards who used them as slaves to work the mines and to till the soil.

A definite distinction was soon made, however, between the mine workers and the agricultural workers, the Indians employed in the mines being first the slaves whom the Aztecs already held, and later the captives in wars of the Spaniards against rebellious tribes; native laborers outside of these classes were not legally used in mining. The term *repartimiento* was officially applied only to the first division of Indians, and all subsequent assignments of workers were known as *encomiendas*, literally a "confirmation" of the original grants, which had been only for the lifetime of the recipient;

thus the heirs of the original conquerors did not receive *repartimientos,* but *encomiendas.* The word *repartimiento* then came to be applied arbitrarily to the slave gangs which operated the mines. These latter were augmented, as the number of captives dwindled and the original slaves died out, by Indian criminals and those natives whom the Spaniards could induce into a state of debt which they could be forced to work out in the mines.

Much of colonial history is the record of the struggles of the Crown and the Council of the Indies with the Spaniards of Mexico over the enslavement of the Indians. The *encomiendas* were finally abolished, largely through the efforts of Fray Bartolomé de las Casas, the Dominican priest who is known as the apostle to the Indians. By 1545 most of the abuses in connection with the *encomiendas* had been corrected, and, although the system itself was allowed to persist, the "new laws" ultimately abolished all of the *encomiendas,* as the owners of the Indians were not allowed to transfer their rights, and when they died without legitimate issue these reverted to the Crown. The wide gulf which had been created in the beginning, and which was perpetuated by the fact that the Spaniards had definitely become the landowners and patrons and the Indians the laborers and wards, continued on to the days of the independence, and is the psychological basis of the peonage problem of to-day.

The system of peonage or enforced labor for debt, according to the Constitution of 1917, has

now been abolished. Actually, however, it has not existed in legal form for sixty years. The Constitution of 1857 is as explicit as that of 1917 in providing that no one in Mexico may be forced to labor without his full consent or to work out any debt save by choice. But neither the Constitution of 1857 nor the Constitution of 1917 was able to destroy the peonage system at its root—that is, in the Indian and peon mind. Feudal obligations are comforting and acceptable when they are accompanied by feudal protection. Under the genuine Mexican system the peons had a definite master, but the master was also the protector of the peons. Only under the feudal system could the Indian have all the privileges of a member of the family, including care when he was sick, education for his children, the right to hunt and to fish, and the privilege of tilling a private plot of corn in his own dooryard. In the attempts to abolish peonage the Mexican reformers have sought at the same time to perpetuate these feudal and patriarchal protections, even though the definite attachment of the peon to the *hacienda* is apparently vital to their functioning.

Historically, peonage and the paternal attitude of the *hacendado* toward his workers both go back to Spanish times, having their roots in the virtual slavery of the *encomienda* Indians to the conquerors. At the time of the independence, however, peonage had developed into a financial relationship which sealed the service of the peon by a system of debt advances—a condition dictated more by the

psychology of the Indian than by the greed of his master. Under Diaz the abuses of the system of advancing money had become so great that thousands of laborers were carried on plantation books with debts as high as P1,000 each, a sum which it was utterly impossible for them ever to work out in their lives, and which led inevitably to attempts to fasten the debts of fathers upon their sons.

As it exists in these days, there is almost nothing of personal slavery or economic oppression about Mexican peonage, save in the small proportion which takes the form of convict and shanghaied labor. In the vast majority of peonage cases, only the money advance holds the worker to his employer; there is no other claim to his service. Even this money advance in its original form has nothing of economic pressure—the peon gets it because he insists on having it before he goes to work, and he spends it promptly and without formality upon a wedding feast, the celebration of a national holiday, a Bacchanalian orgy in honor of his favorite saint, or on useless finery for his sweetheart. In the old days, this first sum averaged P50 (often as little as P10) and it was never over P200. Although the *hacendado* usually managed to keep a peon at work for a year before this advance was worked out, the anniversary of the festival for which he had formerly sold his liberty was almost invariably accompanied by a new application and another advance. Under this system there was practically no real enslavement of labor, as, if the workman was unsatisfactory to his employer, or if he was

dissatisfied with his conditions, the *hacendado* to whom he was willing to transfer his allegiance was glad enough to buy his debt at full value.

The much criticized *hacienda* store, or *tienda de raya* (literally, "ration store"), was a corollary of the system of peon debt. Theoretically, it was a place where the peons could obtain, on credit, the food, clothing, and supplies they wanted, but in practice it was often abused to the point of overcharging, in order to keep the peon's account so heavy that he could never hope to work it out entirely. The *raya* system certainly kept out competition for the peon's trade, and where, as happened in some places, even the "free" labor was paid in paper coupons good only at the *tienda de raya*, the situation did become virtual slavery, the credit system and not the original debt advances being the means of attaching workers to the *haciendas*.

Then came the tremendous demand for labor between 1890 and 1910, when, as new industries and new plantations opened up, the supply of workers became more and more inadequate; and the advances made to peons became of themselves a more serious source of trouble than the *tienda de raya* had ever been. The henequen industry of Yucatan took a great boom owing to the demand of American harvesting machines for stout twine, and also hundreds of American rubber and coffee plantations opened up on the Isthmus of Tehuantepec. It was then that the peonage system, and with it the *enganchado*, or contract labor system, came into full flower. The prices paid for henequen made it pos-

sible to increase the cost of labor tremendously, and the Yucatecan landlords combed the Gulf coast and finally secured government aid and the ultimate transportation of Yaqui Indians from Sonora to Yucatan to aid them in the solution of their labor problems. They became active bidders in the tropical labor market, offering advances up to P200 and P300, with transportation to the henequen fields.

Then came the American companies which had guaranteed their stockholders to plant rubber or coffee or sugar in appalling acreages. They had to have labor at any cost. They sent to the towns of the hot country during festivals, piled silver pesos in great heaps on tables, bid against established Mexican *hacendados* and against one another until their labor cost them up to P1,000 per head. The laborers were transferred in batches to the plantations or became part of the entourage of keen contractors, and in addition to the advances, the pay of labor rose from 25 centavos a day to as much as P3 a day. Wages at this figure, where clearing, planting, weeding, and cultivating all had to be done by hand, with the added losses caused by laborers who did not fulfill their contracts, piled the cost of agriculture to proportions impossible for the crops to sustain.

So valuable did this labor become that bribery and government coercion, special detectives and policemen, had to be called in to capture and return the peons who ran away from their contracts, and judges and the mayors of towns were induced to

arrest the runaways. When the free labor of the tropics was exhausted the American and other planters had recourse to the *enganchado* system. This method of contract labor had had its beginnings years before in the Valle Nacional, the great tobacco-growing section where Cuban planters had been using and abusing convict labor furnished them by the state of Vera Cruz and later by the Federal government. Sanitary and working conditions were unquestionably frightful in the Valle Nacional, and when the Yucatan and Tehuantepec plantations entered into the competition the quality of the labor began to deteriorate and the abuses to increase. The *enganchado* (literally the "hooked one") was generally a man who was practically shanghaied from the cities of the temperate and cold zones of Mexico. Often disease-ridden, almost inevitably soaked with *pulque*, captured and "signed up" for labor when they were intoxicated, these men were brought down practically in chain gangs by the contractors and delivered at so many hundred pesos per head. They were kept in barbed-wire inclosures, often under ghastly sanitary conditions, their blood vitiated with drink and tainted with disease, and were easy victims of tropical insects, dirt, and infection. There is no need here to gloss over the conditions attendant upon the *enganchado* system; if excuse there be for its existence, we must find it in the material advance of the country beyond the social education which alone could create the ambition and the industry to turn Mexico's cheap labor into a truly productive factor,

Basically, however, the system of debt advances, whether it be in the sunny plaza and with the clean, if inconsequential, Indian of the Isthmus, or in the dives of the capital, with the *pulque*-drinking scum of the cities, goes deep into the psychological foundations of the Mexican mind. It belongs with the desire for paternal care and with the childlike craving for the enjoyment of the fruits of labor before the labor is assumed.

The labor problem, in so far as it is a social problem, depends ultimately upon education and the advance of the native standard of living. To achieve these, Mexico must be economically sound, and to be economically sound she must produce her own foods and support by her own foods the industrial and agricultural population which creates her wealth. In the present state of her development, the *hacendado* alone is capable of furnishing the nation's food, and to the *hacendado*, as to the mine operator and the plantation manager, the patriarchal organization is the only method yet devised for harnessing the Indians' need for a livelihood and his desire for such of the good things of life as he can comprehend to the production of a surplus food supply to support the mines and industry which must be Mexico's chief contribution to the created wealth of the world.

The *hacendado* may indeed be wrong, but the fault is the fault of a national psychology and not of individual wills. At his worst, no *hacendado* relishes the idea of tying up his capital in advances to his labor, but the system of advances is milk to

the lips of the Indian and peon. The attempt to abolish peonage in Yucatan under Madero brought genuine relief to the *hacendados*, and at the same time struck consternation to the Indian workers, who were cut off from the only system of "savings" which they knew—that is, the system of spending the money first and having the *hacendado* save it and repay himself afterward.

The attitude of the Mexican toward his work, thus expressed, has much to do with his efficiency, and this, needless to say, is not improved by the hopelessness of his outlook, whether this is due to his own shortsightedness or to the oppressions of his superiors. Mexicans themselves have been the first to deplore the low production of their people, and Matias Romero, writing in American newspapers in 1892, stated that "in the same year when the United States, using 7,500,000 laborers, produced $3,000,000,000 worth of agricultural products, Mexico, using 2,500,000 laborers, produced only $239,000,000 worth, the American laborer's production being $399 and the Mexican laborer creating only $95."

American observers have noted that in many phases of mine work it takes two or three Mexicans to do the work of one American, and where American machinery is imported it often requires expert supervision to maintain its efficiency, so that often the upkeep of machinery, including labor costs, in Mexico is more than in the United States, and in some cases even more than the cost of hand labor to achieve similar results. Since the expulsion of

the Americans from Mexico by the revolution, the Mexicans have maintained in fair working condition such machinery as has continued in use. The locomotives of the National Railways are patched and wheezy, but the Mexicans who are operating them, including both the enginemen and the mechanics in the shops, have displayed much ingenuity in the maintenance of the equipment. But this ingenuity has been without appreciation of costs and at a terrific expense in ruined material and in wasteful maintenance of almost worn-out engines, where many in better actual condition have been allowed to rust away because the problems of their repair required a greater effort of planning than the maintenance at low efficiency of the locomotives still in use.

Observations made by American industrial experts in the Mexican cotton factories during the Diaz time were to the effect that the quickest of the Mexican boys could not manage over 450 or 500 spindles, while a bright girl in the Fall River factories can handle as many as 700, and one observer went so far as to say that if the Mexican factory, with all its advantages in the way of hours and labor and wages, were transferred to New England, it would, in place of realizing a profit, sink $100,000 per year.[1]

The adaptability of the Mexican and his capacity for learning new trades which modern industry has opened to him are, however, uniformly praised. One of the most remarkable achievements of any

[1] David A. Wells, *A Study of Mexico*, p. 150.

great industrial corporation was that of the National Railways of Mexico in the creation of the class of mechanics and engineers who made the industrial development of Mexico possible. In the twenty-two years from 1890 to 1912 the National Railways put through systematic training between 15,000 and 18,000 Mexican workmen, most of them unskilled laborers with a wage of 62½ centavos a day. In courses lasting one to three years, these men became skilled mechanics, firemen, and locomotive enginemen, who are to-day earning from P8 to P12 daily on the Mexican railway systems, or in mines and industries.[1]

From a period when it was absolutely impossible to hire a Mexican who could operate even a simple American machine to the creation of a class of mechanics and mine workers who are as a whole appreciated and praised by their former American and British employers, is an achievement for which there cannot be too much praise. Perhaps the chief deterrent of the full development of the Mexican as a mechanic is his proverbial carelessness. In the handling of dynamite in the mines, in the operation of dangerous machinery, and in the attention which is required to save delicate tools from destruction, he often falls below normal standards. Yet this condition is perhaps due more to his lack of the intelligence that comes from general education and general appreciation of values than to anything directly related to his trade.

[1] Testimony of E. N. Brown before the United States Senate Subcommittee Investigating Mexican Affairs, 1920, p. 1792.

In his use of tools the Mexican has had only a brief inheritance. The universal tool in Mexico is the *machete*, a knife about three feet long and two inches wide which the peon uses for harvesting his crops, for clearing the jungle, and as his chief side arm as a soldier. American tools he has learned to use but slowly, and is only beginning to understand the convenience of American saws, axes, shovels, and plows, while his personal aversion to anything in the way of labor-saving machinery is still the marvel of his white employers. Not least typical of the anecdotes of an earlier day is the story of the Mexican workman who, having been in the United States, returned to report that he found that "they are very backward in hand work up there."

The question of Mexican labor efficiency resolves itself ultimately into a psychological problem. The chief failure reported by all employers of labor, both Mexican and foreign, is the lack of application and the low mentality of the laborers. It is for these reasons that the employers of women in such industries as the cotton mills find that in spite of the cigarette smoking and other ways of wasting time which are characteristic of the Mexican male, he will do more work than the average peon woman, whose mind, untrained either in school or in the keenness of the street gamin, finds the application required for the handling of spindles and looms too great a mental burden to be sustained for full working hours. The whole question of labor efficiency seems inevitably to be carried into

the question of mental training, and hence again to education.

In fact, the Mexican in any class of work cannot be called a steady producer. The climate is undoubtedly a factor here, as is the national tendency to indulge joyously in festivities and recuperate gloomily by days of idleness after each debauch. But even in the factories an hour is taken for breakfast and an hour for lunch, and throughout the day there are always periods of rest, there are innumerable smokings of cigarettes, and inevitable relaxations are required by the mentality or the physique of the worker.

The hours of labor, moreover, vary with the climate and with the type of work done. In the hot country the laborer is up and at his work by 4 A.M., and in many places his day is done at 11, when the sun has risen so high and the heat become so intense that continued physical exertion is impracticable. In the factories of Orizaba, the workers are often at their looms from 6 in the morning to 8 at night, a period broken by frequent rests, but formerly totaling approximately ten hours. In the farms on the plateau the work is from 6 in the morning to noon and from 1 or 2 to 6 in the afternoon. In the mining districts the working day varies with the local conditions, but used to average ten hours.

As a general rule the hours of industry under Diaz totaled from ten to fourteen a day, except in the hot country. Under the Presidency of Francisco de la Barra (between President Diaz and Presi-

dent Madero) a basic eight-hour day was proclaimed in the cotton industry. Carranza's government extended this to take in the entire industrial field, a rule of somewhat questionable wisdom in Mexico, where the native development of "piecework"—the *tarea,* or task system—has long offered a more acceptable solution of the human problem of labor.

Since time immemorial the laborer has been assigned the amount of work which it is believed that he should do in a day, a task which can usually be finished in eight hours or in six by an industrious workman. The origin of the system goes back to the days of the Spanish *hacendados,* who found even then that if their labor was given a definite amount of work each day it would accomplish that work in a comparatively brief space, while if it was worked by the hour it would inevitably loaf and waste.

The task system has through centuries been worked out to extreme niceties in Mexico, and the discussions of Mexican labor by foreigners almost inevitably reveal in each report the moment of the foreigner's "discovery" of the efficiency of the task system. It is this method as worked out on the plantations in the hot country that makes it possible for the laborers to do a day's work in the hours between 4 and 11 A.M. noted above. In other sections of the country the task system is such that industrious laborers have found it possible to do two *tareas,* or two days' work, in ten hours of steady grind. It is to be noted that it is chiefly in the lines where it is impossible or too expen-

sive an administrative problem to lay out *tareas* that there has been most difficulty with Mexican labor.

The peonage system and the task method of handling labor are the most significant factors of the working conditions, as such, in the agricultural field. Their influence and the influence of other changes which have come in recent years have also been felt in other industries. In mining, the slow development away from the "rat hole" workings of olden days to the modern methods of the great foreign companies and a great elaboration of the task system has brought with it decided changes in working conditions.

The cotton mills of Mexico, save for their long hours, have been neither horrible examples of unsanitary conditions nor yet models of what such establishments should be. Many of them are located in the cities, but most are in the country, near water power, where air and light are cheap. There is practically nothing comparable to "sweat-shop" working conditions in Mexican industry, though often both workmen and employer, more unthinking than grasping, may overlook some of the provisions which are necessities to the minds of more advanced industrial experts.

It is probable, indeed, that the worst conditions in Mexico are to be found in the so-called "home" and "native" industries, where the workers are content to live and work in a stifling, crowded environment, for it is primarily the native lack of values in the matter of light, air, and cleanliness

that is at the root of all the evils prevalent in Mexican factories, as in Mexican homes.

The laboring classes of Mexico are naturally divided by working conditions into three very distinct groups, which may be taken as the social classifications of labor:

1. The common laborers, including the field workers and those employed in building and on the construction of railways, highways, and public works,
2. The workers dependent upon modern industry, and
3. The workers in primitive industries.

In Mexico, the peon, or common laborer, not only does the farm work, digs the ditches, carries the burdens of mine and manufacture upon his back, but works at such trades as carpentry, plastering, stone cutting, the making of adobe bricks, etc., for as a rule only the chief carpenter or mason considers himself above the peon class. In the census figures of employees in industry, however, no clear division is made to distinguish common laborers engaged in such business as carpentry and masonry, for instance, and even railroading, from the common peons, on the one hand, or from the skilled workers in these industries, on the other. For this reason it is probable that the 3,130,402 *peones del campo* (rural peons) listed in the 1910 census include many thousands of unskilled laborers in industries other than agriculture. To the group of common laborers, we must, however, add the 334,600 members of the lower class who are engaged in miscellaneous trades

that are neither modern nor primitive industry, the total then being 3,489,778.

The workers dependent directly upon modern industry include the laborers in factories, railway employees, etc. Mining, the workers in which number 95,878, may properly be included in this class, so that, including 30,592 artisans of the new middle-class, the total workers in mines, modern industrial plants, and transportation number 293,214.

The third of the social classifications of labor takes in those engaged in the primitive industries of an essentially Mexican character. These are carried on in the homes of the people and are such crafts as pottery, embroidery, and drawn work, feather work, home weaving of *rebosos*, or shawls, and the makers of *zerapes* and other products of the hand loom, of baskets and Mexican hats. The number thus employed totals 117,858.

These three divisions account for most of the lower classes and some of the higher, but there are other groupings essentially connected with the higher Mexican social scheme, such as government officials, the military and professional classes, including Catholic priests and Protestant missionaries, the commercial field, including bankers, clerks, and bookkeepers, miscellaneous trades and professions, and domestic servants, including the large classification of laundresses.

To estimate the totals in these general classifications the only statistics available are those of the Mexican census, that of 1910 being used. (The only other industrial census was in 1895.) Inac-

curacies, faults of classification, and such arbitrary divisions as the placing of all day laborers (*peones del campo* or *jornaleros*) under agriculture, must of necessity be carried into the reclassification. This new arrangement has been made to show not only the social divisions into types of employment, but also the proportions of the workers to the three social classes, the totals showing 4,554,902 of the "laboring classes" and 925,036 of the "middle and upper classes."

Laboring Classes		Middle and Upper Classes	
	Agriculture		
Farm laborers	3,130,402	Hacendados	834
Cattlemen	12,869	Ranchers	24,417
Herdsmen	164	Farmers	410,566
Shepherds	875	Overseers	4,763
Horticulturists	10,868		
	3,155,178		440,580
	Modern Industry		
Factory employees	58,840	Industrial administrators	2,099
Miners	79,024	Mining administrators	494
Smelter employees	15,921	Assayers	439
Metal refiners	138	Contractors	68
Fiber manufacture	5,829	Building foremen	502
Cigarette makers	6,893	Mechanics	23,383
Millers	621	Machinists	221
Cotton manufacture	32,209	Printers and engravers	5,577
	199,475	Electricians	1,411
			34,194
	Native Industries		
Basket makers	2,086		
Artificial flower makers	1,689		
Pulque makers	1,375		
Reboso weavers	7,346		

Laboring Classes		Middle and Upper Classes	
Native Industries (cont.)			
Spinners	486		
Sandal makers	51		
Lace makers	8,606		
Hat makers	17,895		
Mat weavers	22,684		
Potters	22,654		
Sweetmeat makers	5,995		
Adobe-brick makers	655		
Charcoal burners	9,155		
Wood gatherers	6,058		
Tamale and biscuit makers	1,042		
Chandlers	2,590		
Lime burners	1,255		
Fireworks makers	3,237		
Chocolate makers	305		
Canoe makers	692		
Water carriers	2,002		
	117,858		
Business and Transportation			
Railway employees	560	Bankers	174
Locomotive firemen	41	Brokers	1,303
Motormen	621	Shippers	54
Sailors and shipworkers	5,931	Business agents	1,888
Sail makers	2,834	Merchants	236,278
Peddlers	8,165	Hotel keepers	233
Expressmen and Freighters	6,008	Traveling salesmen	49
Muleteers	25,629	Telegraph operators	2,550
Wagoners	6,518	Telephone operators	368
Coachmen	6,470	Clerks and bookkeepers	19,057
Chauffeurs	369	Stenographers	732
		Salespeople	83,442
	63,146		346,128
Miscellaneous Trades and Professions			
Tanners	8,312	Architects	542
Tailors	25,865	Dentists	430
Butchers	10,360	Engineers	4,256
Slaughterhouse employees	6,337	Midwives	3,027
		Ministers (Protestant)	285

Laboring Classes		Middle and Upper Classes	
Miscellaneous Trades and Professions (cont.)			
Blacksmiths	22,568	Roman Catholic priests	4,405
Furriers	1,433	Notaries	318
Dyers	353	Physicians, allopathic	3,119
Glaziers and gilders	402	Physicians, homœopathic	602
Hunters	375	Veterinarians	234
Salt and gypsum workers	1,090	Artists	1,773
Pastry cooks	1,782	Writers	559
Soap makers	960	Designers and draftsmen	290
Coopers	372	Musicians	14,214
Barbers	9,498	Sculptors	699
Bricklayers	61,762	Decorators	7,576
Carpenters	67,346	Singers	452
Plumbers	1,754	Archæologists	1
Shoe makers	44,114	Opticians	1
Brick makers	3,220	*Curanderos* (herb doctors)	46
Founders	1,020	Nurses	379
Brewers	160	Actors, etc.	1,485
Bookbinders	1,173	Bullfighters	272
Lumbermen and wood workers	6,415	Photographers	1,206
Tinsmiths	2,252	Lapidaries	369
Coppersmiths	1,173	Silversmiths	3,670
Chicle gatherers	790	Watchmakers	1,078
Bakers	29,410		51,288
Harness makers	7,177		
Cigar makers	3,474		
Stone cutters	7,526		
Fishermen	4,528		
Lottery-ticket sellers	405		
Minor occupations	894		
	334,600		
Public Service			
Police	6,817	Teachers	21,007
Soldiers	25,814	Army officers	3,703
Navy	603	Civil service employees	27,602
		Navy officers	555
	33,234	Diplomatic Corps	62
			52,929

Laboring Classes	Middle and Upper Classes
Personal Service	
Domestic servants... 241,306	
Laundresses..... 64,737	
Tortilla makers..... 26,419	
Janitors..... 3,841	
Millers (domestic)... 253,737	
Seamstresses..... 82,926	
Dressmaker 8,452	
681,418	
No Class Divisions	
	Housewives..... 4,138,501
	Scholars..... 843,741
	Students..... 30,646
	Without occupation..... 243,377
	Minors..... 4,302,435
	Beggars..... 96
	Mesalinas..... 2,699
	Trade unknown..... 65,554
	9,627,049

In this classification the work of children and women is not noted separately. Until the establishment of the Department of Labor and Industry under Carranza but few facts were gathered and little attention given to these important social classifications. A census and study of the question were begun in Mexico City late in 1919, but only scattering data were forthcoming. The usual complaint was made of the desire of employers to hinder rather than aid the survey, and it is significant of the immutability of conditions in Mexico that, despite the elaborate laws and provisions of the revolutionary reformers, for "equal pay for equal work" and for proper hours of labor, early reports state that "the

employers do not requite the good qualities of the women workers with living salaries. Almost all the women have dependents and one wonders how they can live on 50, 40, and even 30 centavos a day. As to the apprentices, they are kept months without wages or perhaps are paid 10 centavos a day for nine or ten hours' work."[1]

This mention of apprentices is one of the few available notes regarding the work of children. Government statistics give only scattering data, and these in most unexpected places. Thus the report of accidents in the mining industry for 1903 gives a probably very reliable summary of mining employees, separating children as well as women, something which census statistics do not give. Thus of 78,015 workers in mines, 796 were women and 4,278 children; of 21,081 employees in reduction works, 36 were women and 825 children.[2]

In factories children have been employed in a small way for many years, but the legal limit has always been twelve years, and there has been some effort to arrange for the education of such workers. Under Carranza the laws provided for short hours for children under sixteen, but boys are found in the mining business and in agriculture well before they reach the age limit.

The Mexican peon is naturally a laborer, and the destiny of his children is to the use of their hands alone for their livelihood, so that with this overpowering tradition of manual labor it is difficult to

[1] *Gazeta Mensual del Dpto. del Trabajo,* November, 1919.
[2] *Anuario Estadistico,* 1903.

judge of the ethics toward Mexican child laborers compared with those in other lands. Personal observation covering a considerable period of the normal years of Mexico under Diaz, and including many states and many industries, bears out the common opinion that, despite isolated abuses, the childhood of Mexico is not overworked, that it is not driven to tasks for which it is not fitted, and that, above all, it does not wear out its youth on "soulless machines." Such a child-labor problem as there is in Mexico is still one where prevention can be effective, and toward this prevention the laws, at least, of both Diaz and Carranza have been adequate.

Of the work of women there are more reliable data. In this connection a comparison of figures for 1895, when the first industrial census was made, and for 1910, is most illuminating, despite the obvious faults of classification.

In 1895, out of a total of 89,072 workers in mines, only 812, or less than 1 per cent, were women, figures which, in 1910, had fallen officially to but 467 women out of 79,024. Interestingly enough in ore reduction, where it might seem that women's service could be used more extensively, only 145 out of 24,811 were women in 1895, and there was only 1 woman out of 16,059 in 1910. The statistics of agriculture in 1895 listed 110,148 women out of a total agricultural population of 2,890,991, or less than 4 per cent. The figures for 1910 were 61,981 women out of 3,570,674, or 1.7 per cent.

In the professions we find that in 1895, 6,463 of

the 12,583 teachers, or 51.3 per cent, were women, and in 1910 these figures had grown to 13,532 women, or 64.6 per cent, out of a total of 21,007 teachers. In 1895 there were 2,076 midwives and 20 women dentists, druggists, and physicians reported, and in 1910 these figures had grown to 3,027 midwives and 127 female druggists, 14 dentists, and 64 physicians.

Out of 233,222 brokers, merchants, clerks, and peddlers in 1895, 55,062, or almost 24 per cent, were women, although this large proportion may be accounted for by the more detailed division of men employees in business. In 1910 the corresponding figures were 52,276 women out of 276,638, or 18.9 per cent.

In modern industries and factories the labor of women has been growing. In 1895 there were 8,930 women cigarette makers as against 1,467 men, the proportion in 1910 being 5,353 women and 1,540 men, an apparent loss, due to the increase in the use of machinery. On the other hand, men were used chiefly in the making of cigars in 1895, the female hands forming less than 8 per cent of the total. The figures for 1910 were 361 women and 3,113 men, or 11 per cent women. In "industrial establishments," referring to cotton factories, there were, in 1895, 9,868 women out of a total of 20,994, and in 1910 12,565 women out of 32,309. The classification of "spinners of cotton and wool" probably refers to native hand industry, there being 30,262 women in this work in 1895 and 13,990 in 1910.

Of the new opportunities which modern business has opened to women, the female telegraph operators numbered 136 in 1895 and 188 in 1910; there were no women telephone operators in 1895, and 134 in 1910. No typists or stenographers were reported in 1895, and in 1910 only thirteen typists and no stenographers, the certainly growing number of these women employes being lost, probably, in the total of clerks (949 in 1895 and 1,876 in 1910).

In the chief branches of domestic service the following changes between the two years are found: Women servants, 187,864 in 1895, and 181,914 in 1910; laundresses, 48,923 in 1895 and 62,324 in 1910.

The relations of all Mexican laborers to the employer are basically patriarchal. Practically every Mexican who has ever worked for another has, as his traditional background, only the *hacienda* or the mine. The *hacienda*, as we have seen, bases its efficiency absolutely upon the patriarchal attitude of the proprietor toward his peons, and the accumulated experiences of foreign as well as Mexican mine operators supports the early discovery of the *hacendado*, that the most satisfactory way of handling labor in Mexico is to attach it to the industry by personal bonds with owner, manager, or superintendent.

It is chiefly for this reason also that the form of labor organization which has taken its place in Mexico in the last decade has been almost entirely upon the syndicalist or guild plan. The unions in Mexico are unions of factories rather than unions of

crafts. The typical Mexican labor organization includes every employee at day wages of the plant from which the union takes its name, from the highest paid skilled mechanic to the most inefficient of errand boys. This organization is formed on the principle of dealing directly with the employer and in bringing the entire power of the plant to bear upon him in the case of dispute. If there is a strike it is a strike of all employees and not merely of the mechanics or the spindle tenders. So deep-rooted is this system of factory solidarity that labor organization in Mexico has practically never attempted to take the form of craft unions known in the United States. Instance after instance could be cited of the vital significance of this guild and factory solidarity, for the guild form of organization is the natural development of the industrial system of which the *hacienda* is the parent.

It would profit little here to go into an exposition of the labor legislation which has sought to transform the industrial system of Mexico in the past decade. The Carranza revolution, originally a political upheaval with political nostroms for the economic and social ills of the people, was changed, just prior to the writing of the Constitution of 1917, into a socialistic manifestation linked by artificial and but poorly understood sympathies with the radical movements of Europe and the United States. The result of this control of the brains of the revolution was the 1917 Constitution with its radical labor provisions and the laws which followed, but at this time it would be unfair both to

these radical philosophers and to the Mexican people themselves to conceive that these constitutional provisions and these laws are actually an expression of the ideals and aspirations of Mexican labor. As time goes on this labor legislation is adapting itself more and more to a certain primal communism which is far more Indian than any of the modern phases of socialism which are found in more completely developed industrial nations. It is still too early to determine whether these Indian communal ideals will dominate the expression and the interpretation of the social and industrial legislation of the country. We return in the observation of this situation to the tendency which has been noted again and again in these pages—the tendency toward Indianism. The Mexican radicals, no less than the Mexican conservatives, must keep watch over the tendencies of their people to guard against the swamping of their ideas by the tides of that unfathomed sea.

In discussing the labor problem of Mexico, we note only thus briefly the later developments of the situation. But again, as throughout this book, the search is not for the surface indication nor even the apparent tendency of the moment, but for the deep underlying forces and the manifestations of those unchanging facts which have dominated Mexican history in the past, are dominating even its chaos of to-day, and will dominate the future, no matter whether that future be expressed in terms of Spanish conservatism, Indian communism, or modern European radicalism.

XI

INCOME AND THE COST OF LIVING

MEXICO is a country of low wages; normally it is a country of low living costs. In the years through which we are now passing, where dollars and pounds, francs and pesetas, bounce about like bubbles, blown by economic gales and political cyclones, all figures of wages and food costs seem more significant of general world economics than of a nation's own internal conditions. This is probably less true in Mexico than elsewhere, however, because Mexico with her gold coin and her financial isolation has been and still is almost unaffected by international exchange. The element of error in a true appreciation of the significance of income and living costs in Mexico is found almost alone in the confusion wrought in her life by ten years of revolution and by four years, now happily ended, of a diabolical abuse of fiat money.

In our study of the financial side of living conditions, we seek again the underlying fundamentals, the unchanging facts which alone can truly clarify past, present, and future. The chief of these fundamentals is the national improvidence. Throughout

Mexican history, the rich as a class have overspent their incomes; the middle class has emerged in two groups, one those whose ambition was to live well and look prosperous, and the other engaged in the friendly and profitable "side line" of lending money at usurious rates to its fellows of the middle class; the poor of Mexico have lived for centuries on the poverty line.

The improvidence of the upper and middle classes is largely the result of the social system. That of the peon, in whom our interest centers here, has more obvious, and more complicated, beginnings. His precarious and characteristic position on the slippery edge of pauperism seems indeed to be more the result of his own choice than of the economic faults in the Mexican system. As pointed out again and again in these pages, the problem of Mexican uplift is a problem of education to ambition rather than of producing an economic situation which will allow the Mexican to satisfy the alleged cravings of generations. Experience has taught both the upper-class Mexican and the intelligent foreigner that the limitation of desires manifested in the Mexican peon is in his own mental repression through generations of race and cycles of climate, and has little or nothing to do with his economic condition.

The peon works only enough days to support himself and his family in the most meager fashion. The evidence on this point is overwhelming, and large employers of labor throughout the country have found it necessary to carry a surplus of 25

per cent or more on their payrolls in order to guarantee the daily average of workers necessary for the prosecution of any piece of work. Therefore the peon, working only long enough to satisfy his needs, has been able to increase his hours when food increased in price, so that where at one time he might have satisfied his wants with three days' work per week, he could, with the price of food doubled, work six days a week at his old salary and still live as well as usual. Only in the past few years has the question of wages had a close relationship to living expenditures, and this only because the rising prices of food, due to the destruction of the revolutions far more than to the increased cost of living the world over, have made it impossible for the Mexican sufficiently to increase his efficiency by his own choice to make living easy, as he has always done in the past.

Moreover, conservative Mexican economists have long insisted that the country's social problems have no striking or general economic parallel. Typical of the reports on this point is one made to the *Segunda Semana Agricola* (an agrarian conference held in Mexico City in 1912), which stated that in the low-wage district of the state of San Luis Potosi the peons were not addicted to drink, concubinage was comparatively rare, religion and education were on a relatively high plane, the children wore clothes, were usually kept clean, and the peons themselves were well dressed and generally free from sickness, and, above all, usury was practically unknown. By contrast, in the state of

Morelos, where wages were relatively high (P1 to P1.50), drunkenness was very common, concubinage was widespread, there was practically no religious or school instruction of the peon, hygienic conditions were very bad, and usury was rampant, monthly interests of 3 per cent to 8 per cent being collected. The parallel was carried through many sections, with the general conclusion that the scale of wages had almost no effect on the standard of living, except where cynical observation found that vice and not improved living followed increased wages.

Much of the confused personal economics of Mexico is also due to the fact that the sources of income do not follow conventional divisions. The national wealth was originally created by mines and agriculture and concentrated by trade and revolutionary brigandage, while land, even under modern conditions, has been almost the sole recognized repository of investment for the national wealth. Industrial development (including mining since it became an industry and not a form of adventure and speculation) has been brought about almost entirely by foreign capital, for it is an axiom of those long resident in Mexico that a Mexican will not invest in industrial and public service enterprises except on a small scale in conjunction with quantities of foreign money. Mexico's banks draw almost none of their capital from savings and little from the increment of national wealth. Almost the only method, aside from farms, by which capital is "produced" may be said to be

usurious interest collected either by banks or by individuals. The result is that the income of the upper classes is largely from land and farming of various sorts, from definite inheritances, and from usury. Their only other source of income is from personal service, in the professions and in government posts. These returns have never been high, and save for the foreign companies which paid well for their representation by Mexican lawyers, the salaries and fees obtained by upper-class professional men have certainly never been producers of capital.

In the middle classes there was under the Diaz peace a growing opportunity in salaried positions and in the mechanical arts. The largest divisions of this group were indeed a product of the economic system nurtured under Diaz, and the reactionary instincts of this class which could hope to advance or even to exist only in an industrial community have been one of the stabilizing forces acting upon the new revolution. Their conservatism is, in fact, largely responsible for the modicum of success which Carranza obtained during his four years of rule. The middle class, however, suffered most during the paper-money orgies of Carranza, but it gained something in the advances in salary which, however inadequate under paper-money conditions, were usually maintained after a stable currency was again established. This situation applies to government clerks, even to school teachers, and to the skilled artisans of railways, shops, smelters, and mines.

The lower classes, whose living conditions must of necessity be taken as the national index, have but one source of income, their physical efforts. They live eternally on the poverty line, with their small needs, their ability to reduce their requirements to meet almost any limitation, and their apathetic lack of interest in anything beyond that actually required, combining to save them from starvation.

The history of wages in Mexico can be traced through the earnings of the peons from the time of the Aztecs down to the present. Under the Indian theocracies there was no wage system, the production of food being almost entirely on the communistic plan, and distribution was carried on by barter. The Spaniards perpetuated the features of the Aztec system which were convenient to them, and labor was practically unpaid through the early years of the colonial period. This system was thoroughly well established before the use of money became general among the lower classes, and was only gradually broken down. However, Baron von Humboldt stated (and this is the earliest record of peon wages which we have) that the agricultural laborer in 1804 received about 28 centavos per day. During the revolutions wages fell, reaching the level of 12½ centavos per day in most sections of the republic, although in certain parts they were as high as 37 centavos. In 1878 the average of wages for the country was 18 to 37 centavos. In 1884 wages ran from 25 to 37 centavos, fluctuations being very slight over the

whole country. Up to the 'eighties, Mexican silver money was practically on a par with American gold, but from 1890 on the value drops to approximately half. Wages did not rise, however, as silver depreciated, and up to 1900 the usual daily wage was 37 centavos for men, and for women and children from 10 to 25 centavos. Carpenters, furniture makers, etc., received 62 centavos, and the head workmen P1 and up. Policemen earned P1 daily, clerks from P15 to P25 monthly, although in banks and railroads the salaries were somewhat higher. Government employees earned from P100 to P150; judges received P4,000 a year; heads of Federal departments P8,000, and state governors P15,000.

The period of prosperity and labor shortage which marked the last decade of the Diaz rule produced an upward tendency in wages which placed the probable minimum at 50 centavos per day in the crowded agricultural sections of the plateau, and in the plantation districts caused the rate to reach 75 centavos to P1, an increase also found in the mines of the north. During the recent revolutionary period, and especially during the paper-money orgies before there was any adjustment of wages, the peon worker on farms and in the mines would have found life absolutely impossible except for the fact that his relationship to his employer provided for the furnishing of most of the food which he ate. In the cities the conditions were such that undoubted thousands, particularly the children, died of starvation. There were,

however, at that time considerable increases in salaries for the workers who continued at their jobs, and to-day the average wage for the peons has generally risen to P1.50, the minimum wage under the new labor laws of many of the states—an increase of 50 per cent to 200 per cent.

In vocations other than that of day laborers, the increase in wages has been steadier. The following comparisons in three cotton-mill sections picture the condition clearly.

Year	Federal District	Jalisco	Puebla
1879.....	P0.68	P0.52	P0.47
1896.....	0.91	0.62	0.84
1909.....	1.00	1.00	1.00
1919.....	2.00–3.00	2.00–3.00	2.00–3.00

There has been a progressive rise in the wages paid to railroad workers. When construction began in the 'eighties common laborers received 25 to 50 centavos; foremen, 75 centavos to P1 per day. In 1907 the contractors of the Southern Pacific of Mexico paid their grade laborers P1.25 to P1.75 per day. In the higher ranks of the railway service no comparison is just, because the majority of conductors and engineers and all of the officials were Americans who received American wages, and when they were finally exiled from the country the demands of the Mexican workmen and the national spirit resulted in the Mexicans who took their places practically doubling their salaries by getting the same as had been paid the Americans in similar

positions. This fact has also had a great deal to do with the increase in the wages of skilled mechanics in the railway and other shops in Mexico. American conductors and engineers used to receive P320 to P400 per month, and American mechanics in the shops received the same union wages that they would have received in the United States, so that to-day less competent Mexican conductors, enginemen, and mechanics are receiving wages of from P8 to P15 per day.

The wage situation in Mexico has been more generally misunderstood than perhaps any other phase of Mexican observation. This was due to a large extent, during the time of Diaz, first to the broadcast advertising of Mexico's cheap labor which accompanied the bid for foreign investments at that time, and, second, to the misinformation regarding living conditions which was transmitted to American tourists. The following table of wages in Mexico, with two comparisons with England and Germany during 1905 (which is taken as a normal era in all three countries) will be illuminating in this connection:

DAILY WAGES IN PESOS

	Mexico					Germany	Great Britain
	1880	1895	1905	1910	1918	1905	1905
Farm laborers.	.18– .50	.18– .75	.25–1.25	.50–1.25	1.00–2.00	1.50–1.75	1.50–1.75
Mechanics	1.50	1.00–3.00	2.00–3.00	2.50–4.75	4.00–8.00	1.30–2.68	2.60–2.92
Railway laborers.	.25– .50	.....	1.25–1.75	1.25–2.00	2.00–2.50	....	....
Mill hands	.12– .50	.12–1.00	.25–2.00	.25–2.00	.50–3.00	....	....
Miners....	.25– .75	.25–1.00	1.00–1.50	2.00–3.00	2.50–3.50	....	....

The clerk class in Mexico has always been poorly paid, employees in the dry-goods stores, in the government departments, and in banks being contented with salaries of from P15 to P125 a month under the Diaz régime, and upon this sum maintaining a social position, wearing European clothes, and enjoying the comforts of life with a nonchalance which only Mexico seems able to inspire. As everywhere, this class has received the smallest proportional increase during the recent period of readjustment, the rise being to P200 per month as a maximum.

The Mexican school-teacher, like so many of his brethren in other lands, has never been well paid, the new law of 1919 placing the salaries of teachers in the Mexican City schools at from P3.09 to P3.66 a day for normal-school graduates, the latter figure being the maximum — a possible P100 a month! Previous to the recent law the wages were higher, temporarily, but this figure is a just indication of middle-class salaries in the profession of teaching. Some of the states paid slightly better, in special instances.

At the basis of the question of how the Mexican lives upon the wages which he receives lies the system of perquisites which belongs to the *hacienda* system. Peonage is founded upon the support of the laborer by the *hacendado*, who, no matter what the cost of food, always stands between his workers and starvation. This system does not begin with the peon, however. In the great farming districts of Mexico before the present revolution, one could

find many significant survivals of the Spanish régime, affecting the *hacendado* and *ranchero* as well as the peon. Beginning at the top, we find that the *hacendado* usually worked with practically no capital except the credit of his *hacienda*. Where he needed money for improvements, for the support of his town establishment, or for travel abroad, he could obtain it by a mortgage from a bank, the church, or a wealthy friend. For the actual upkeep of his *hacienda*, however, and for the maintenance of his army of peons between the periods of harvest, he depended upon the Spanish merchant or wholesale dealer, whose own credit enabled him to do this indirect form of banking for the *hacendado*. The latter, by pledging his entire crop to this Spanish merchant in the nearest commercial center, was able to buy on credit farm implements, seeds, supplies of cloth and trinkets, and even corn and beans, for his peons in times of shortage. When the crop came in, it was all delivered to this local Spanish merchant, who credited it, sometimes honestly and sometimes unfairly, and either turned over the cash balance to the *hacendado* or kept it against future drafts, the merchant thus making at least three profits, one on his sale of goods, one on the interest he charged for his money, and one on the handling of the crop.

The *hacendado*, having got supplies on credit from the town merchant, in turn sold them on credit to his peons. The *hacienda* storekeeper, usually a young Spaniard, was conversant with the needs of practically all the peons on the *hacienda* and kept

their accounts as well as maintaining the store. During famine periods and during the paper-money times when food and all classes of supplies soared in price, it was this system, reaching from the Spanish storekeeper through the *hacendado* down to the peon, that made life in interior Mexico possible.

In addition to these food and goods advances, the farm peon since olden times had made it a custom to borrow small sums of money for emergencies, for festivals, and for his annual outfitting. The company store and the loan system are the chief perquisites of the farm peon. Where the wage does not include free sustenance, corn is sold at a fixed price, always below the market, and even in times of shortage, such as famine or revolution, many *hacendados* have continued to sell at prices a third of the market quotations or less, thus sustaining the purchasing value of the peon's wages and contributing vitally to the equilibration of the cost of living.

In most *haciendas* there are other perquisites; in the *pulque*-producing sections the laborer is given a daily allowance of *pulque* which he may either sell or drink. On practically all *haciendas* the house, or at least the land upon which the peon may build his own hovel, is given him without rent, and those peons who are regarded as family retainers are always allowed the small *milpa*, or corn patch, which they cultivate for their own account, the crop being bought by the *hacendado* or harvested by the peon for his own use.

All this belongs in any fair estimate of the peon's income. Thus a typical low-caste peon who a few

years ago received but 13 centavos a day in the state of Chiapas may be estimated to be getting in reality nearly 50 centavos a day, if we count perquisites and the interest on his debt—no heavier than the *hacendado* pays the Spanish merchant. This peon is bound by a P400 debt, but although his cash wages are at the rate of 13 centavos a day, his salary, food, and perquisites amount to P14.58 a month. This is given him as follows:[1]

Cash	P4.00
500 ears of corn	3.31
20 pounds of beans	0.62
Lime for preparation of corn	0.07
House rent	1.00
Medicines	1.00
Use of land for corn patch	0.33
2 per cent on P200 (half the debt)	4.00
2 bottles of alcohol	0.25
Total	P14.58

The mitigating factors which save the economic situation for the peon on the *haciendas* are paralleled to a certain extent in the communal life of the Indian villages where the workers in the fields produce the food for the village, and yet at the same time have leisure, either during the unproductive months or after working hours, for making the native specialties of their own village, pottery, baskets, hats, or hand-woven wool or cotton.

Turning to the living conditions of the city dweller, we enter a field where perquisites are unknown and no kindly patron bars the door against want. The narrow margin on which the city peon

[1] *Informes y Documentos*, no. 4, *Secretaria de Fomento*, 1885.

lives, and his continued existence, need, indeed, explanations which no figures can give. For instance, in Mexico City in 1919 the average peon workman earned P1.50 a day—that is, P37.50 a month, exclusive of Sundays—and yet the rent for the single room in the wretched quarter of the city where alone he could afford shelter cost him P10, or 27 per cent of his income. His entire income per day could not possibly buy him meat under the prices prevailing, and his diet, therefore, had to consist of *tortillas*, beans, and *chile*, to which he added *pulque*, as alcohol is traditionally the substitute for energy to underfed humanity. The peon and his family can buy such food, and the charcoal with which to cook it, for not one bit less than 50 per cent of his daily income. Shoes, clothes, and hats at second-hand for him and his family can be estimated at P5 per month, 13 per cent of his income. The remaining 10 per cent, or 15 centavos a day, will hardly pay for soap at P2 a kilo, and leaves no margin whatever for the loss of pay which he will suffer if unable or unwilling to work a steady six days a week.[1]

Even going back to happier times in 1910 when the city laborer received 75 centavos a day and yet when his living expenses were considerably less, we might make a more complicated division of his income. If at 75 centavos a day he worked six days a week for fifty weeks a year, his year's income would be P225. Fiestas and other interruptions to work would undoubtedly cut down his average to five

[1] *Gazeta del Dpto. de Trabajo*, November, 1919.

days a week and to forty-five weeks a year, giving him an income of P168.75. To this might possibly be added money brought in by the woman of the family, at 35 centavos a day for five days a week, adding P87.50 a year, raising the family income to P256.25. If the children were working, this might possibly be raised to P300 annually. In 1910 rent might have been P5 a month or even as low as P2 in some of the quarters of the cities, or P24 a year; to cut down the amount spent for clothes to the very minimum estimate, P25 a year for the entire family, would, added to the daily ration of *pulque*, 4 centavos a day, or P14 a year, and 4 centavos' worth of cigarettes, another P14, give a total for all expenses, excluding food, of P77, allowing the almost impossible minimum of rent, P2 a month. From the minimum income of 75 centavos a day there is thus left P91.75, or about 25 centavos a day, for food, while if the entire family is working the daily average for food is 60 centavos, which, divided among the average family of six people, means 10 centavos a day per individual. It seems, in contemplating the cold figures of the city peon's budget, as if it were impossible for him to exist, and yet exist he does, even though his children die like flies and his wife grows old at thirty and reaches her grave by forty—and he exists without working all of the five days a week we have allowed him!

We can carry our view of the Mexican family budget into ranks of society a little higher. In the days of Diaz clerks received from P20 to P125 per month, carpenters from P1.50 to P2.50 a day, or

from P36 a month to P60 a month. Shelter is a larger item in this lower middle class. In the cities where they are found rents ranged, in the old days, from P8 per month for two small rooms, upward. The clothes item likewise is larger because the nature of their work requires better personal appearance. If the Mexican clerk at P60 works twelve months a year he has an income of P720. A rent expenditure of P12 a month will amount to P150. The clothing for his family cannot conceivably be less than P100 because he must wear shoes, he must wear respectable suits and shirts, likewise the wife will need some slight adornment and their children must be dressed for school. The food costs of such a family will run from a peso a day up, varying according to income.

These necessarily crude estimates indicate two things: first, that by the standards of the foreigner the Mexican peon lives actually *below* the poverty line; and second, that the middle-class Mexican is emerging by the help of the low peon standards which give him an advantage in living costs and make him approach independence because he still lives in cheap quarters, his appetite is satisfied with relatively cheap foods, and his clothing, while of different cut, is still made according to native standards and by native workmen.

A glance at the prices for food, shelter, clothing, and cleanliness will clarify this point. Primarily, living expense depends on food costs. In the chapter on Mexico's foods, above, the unity of the Mexican diet was noted. The middle classes

follow very closely the diet of the peon, save for more meats and, of course, greater care in preparation. Let us study the food prices in Mexico at different periods:

FOOD PRICES IN MEXICO AND NEW YORK[1]

(In Mexican Currency)

	NEW YORK 1891	MEXICO 1891	MEXICO 1901	MEXICO 1910	MEXICO June, 1918	MONTERREY Jan., 1919	NEW YORK 1919
Beef (best), pound	.....	.....	.....	.....	.....	P1.00	P.84
Beef (other cuts)	P.14	P.24	.....	P.22	P.42	.50	.70
Pork, pound	.12	.22	.....	.....	.....	.60	.80
Lamb (goat in Mexico)	.16	.28	.....	.....	.....	.36	.64
Black sugar, pound	.....	.....	.....	.08	.28	.....	.....
Sugar, pound	.10	.20	P.18	.08	.32	.40	.20
Lard, pound	.....	.....	.....	.30	1.10	.80	.80
Butter (Mex.), pound	.....	.52	.....	.....	.....	1.30	.....
Butter (Am.), pound	.....	.76	2.00	.....	.....	2.50	1.22
Coffee, pound	.38	.44	.34	.22	.26	.50	.78
Eggs, each	.....	.02	.....	.....	.....	.16	.10
Milk, quart	.....	.....	.....	.08	.14	.30	.30
Corn, bushel	1.00	2.24	3.00	.....	.....	8.00	4.20
Wheat flour, pound	.02	.10	.10	.....	.....	.30	.16
Corn meal (wet in Mex., dry in N. Y.), pound	.....	.....	.....	.03	.08	.10	.14
Bread, pound	.....	.....	.....	.16	.40	.20	.20
Beans, pound	.....	.06	.04	.06	.20	.20	.24
Rice, pound	.10	.14	.16	.08	.24	.24	.28
Potatoes, pound	.....	.06	.....	.....	.....	.14	.10
Onions, pound	.....	.....	.....	.....	.....	.10	.26

[1] New York and Mexico prices of 1891, from Matias Romero, *Mexico and the United States*, 1895; Mexican prices for 1901, from *U. S. Bulletin of Department of Labor*, No. 38, January, 1902; for 1910 and 1918, from *Boletin de Industria, Comercio y Trabajo*, November–December, 1918; for Monterrey, 1919, from the writer's consular reports; for New York, 1919, from *World Almanac*, 1920.

The relatively small difference between food prices in Mexico and New York always strikes the foreign student, but this is of itself proof of the fact that the Mexican peon, at least, lives on less, or wastes less of the food that he has, than does the American. As long ago as 1803 Baron von Humboldt stated that "the Indians, like the inhabitants of Hindustan, are contented with the smallest quantity of aliment on which life can be supported, and increase in number without a proportional increase in the means of subsistence."[1] Moreover, the worst of foods are consumed freely, food adulteration is universal, and tallow serves many thousands in place of lard in cooking. In the time of Diaz, the low-caste peons of Mexico City lived literally on 10 centavos a day, paying for their frugality by the shortness of their lives, to be sure, but living their brief span, nevertheless.

Shelter is actually a small item in Mexico, although where the peon on his tiny wage has a "home," the cost is disproportional. Previous to 1910, the vile rooms in the Mexican city tenements cost P1.50 up per month, while to-day the minimum is about P5. In the slightly higher classes rents increase, but little more is given for the money. At the beginning of the century, little apartments or houses of three or four rooms could be had for P8 to P12 per month; in 1910 two rooms cost as much; in 1920 the cost of two rooms was up to P15. And these had very few of the conveniences which the

[1] Alexander von Humboldt, *Political Essay on the Kingdom of New Spain*, book ii, chap. v, p. 118.

American or European workman would consider necessities, such as light, running water, and good toilets, and, of course, with no real bathroom. Other houses of several rooms cost, in 1910, up to P100 per month, and in 1918 brought P150 to P200. Fuel hardly enters into the cost of shelter in Mexico, because practically none of the houses are heated, though oil stoves are used by some residents of the highlands. In 1910 kerosene cost 12 centavos a liter, and 22 centavos in 1918. Kerosene is generally used for lighting in the middle classes, but candles are even more common; paraffin candles cost, in 1910, 33 centavos a kilogram (about 16 cvos. a pound), and in 1918 were 94 centavos a kilo. Charcoal, almost universally used for cooking, was 2 centavos a kilo in 1910 and 4 centavos in 1918.[1]

The cost of cleanliness in Mexico is difficult to estimate. Laundries are not common, practically all of the washing being done by peon women, who make their charges by time and the cost of soap. The latter item almost quadrupled in price between 1910 and 1918, having been 25 centavos a kilo in the former year and 85 in the latter, and was temporarily up to P2 in 1919. The cost of public baths, of the lower type at least, had advanced but slightly, the price of one bath in 1910 having been 25 centavos, and 30 in 1918.

The basic item in clothing is the price of unbleached muslin, which, in 1910, was 14 centavos a meter (thirty-nine inches), 30 centavos in 1918, and

[1] Figures from *Boletin de Industria, Comercio y Trabajo,* November-December, 1918.

35 in 1920. Blue duck was 40 centavos a meter in 1910, 87 in June, 1918, and P1.98 in February, 1920. The prices of clothing have always been regulated in Mexico by the costs of the imported material, and during the Great War American prices, plus increased duties, determined the cost, where normally the European market, and not the American, is the chief factor. Prior to the 1910 revolution, imported European fabrics made clothing of all sorts far cheaper in Mexico than in the United States, the prices comparing favorably with Europe. A native-made man's suit of the finest English woolens could be had for P35. Paris dresses of all sorts, lingerie, and gloves were virtually the same price in silver as they were in the United States in gold, making the cost exactly half in Mexico. The best shoes were always American, and paid a duty averaging P1.50 per pair, but where native-made textiles cost only a few cents less than the European (the Mexican manufacturer takes full advantage of his "protection"), Mexican-made shoes have always been cheaper than American, owing to their decidedly inferior quality. In 1910 native shoes sold for about P5, in 1918 for P7, and in 1920 for P10 per pair.

Even with such wages and prices, however, the problem of existence in Mexico is decidedly simpler than in more advanced lands. The food problem is solved for many millions by the mere fact that they live upon the soil, and in some sections of the country there is an abundance of native fruits and game, although tropical fruits (despite Baron von

Humboldt's enthusiasm for the banana, more than a century ago), are not alone sufficient to sustain human life, and corn has to be grown for food. Shelter in the country costs the worker nothing, fuel is needed only for cooking, and clothing is hardly required for warmth, the *zerape*, or blanket, handed down from generation to generation, providing both cloak and bed covering.

The lot of the city dweller is, as everywhere, more complicated, but even there the most serious problems seem to have to do with the lack of perquisites to fill out the gaps of his economic life and the lack of credit which on the *hacienda* is alike his "savings" system and his provision for emergencies. As a substitute, the city dweller has recourse only to the pawnshops and to the private money lenders of his own or the higher classes. From the national pawnshop or *Monte de Piedad* (literally "Mount of Charity") and its many branches, down to the usurious hovels in the back streets, Mexican pawnbrokers will advance money on practically anything, literally to the shirt off the peon's back. The use of pawnshops as a means of raising money has always been common in all classes of Mexicans. The *Monte de Piedad* was founded in 1774 by the Conde de Regla, and for many years was operated on a basis of voluntary contributions, no interest being charged, but after a time these were found to be inadequate, and in 1873 interest was placed at 6 per cent a year, and later at 1 per cent a month. Branches of the national pawnshop are established all over the city, and loans are made from 25 cen-

tavos up to P2,000. In addition to the national pawnshop, however, there have been innumerable private establishments. Regulations controlling usury were enforced more or less consistently previous to the revolution, although the scarcity of money and the difficulties of administration under recent governments and with various currencies brought many abuses.

There has always been a considerable amount of usurious money lending on the part of clerks and middle-class proprietors. Mexican stores are often hung with relatively new goods which are not for sale, but which are pledges left by customers or friends for small loans. The interest collected is always high, running up to 20 per cent a month, the loan being upon a valuation of a quarter of the price of the article pledged.

Custom, climate, and human nature thus combine to perpetuate the condition noted at the beginning of this chapter, that the Mexicans as a people live always on the poverty line. The economic system is based in principle on a closeness to the soil, an intimate, primitive conception that persists even in the higher classes, despite modern civilization and the slow encroachment of modern business. This factor makes such data as are available seemingly intangible and incomplete, and yet the very incompleteness, the very confusion of the material, the very lack of understanding of the Mexicans who have gathered it, are themselves indices of how shadowy and primeval is the realm in which the mass of the population lives. Almost

nothing in Mexico is so difficult to grasp wholly as the mere continued existence of the unthinking millions of the peons in the face of living costs and the incomes with which they have to meet their problems. Here, once again, the vast, inert mass drops its dead weight upon the shoulders of those who would save and succor. Back into the dim recesses of dull minds and solemn misery we must reach, again, to educate, to upraise, some day to bring about greater production, broader needs, deeper, finer desires.

XII

VICES, CRIME, AND PAUPERISM

THE philosopher's stone which through all history has transmuted the dross of barbarism into the gold of civilization is self-control. In the races and race mixtures and above all in the climate of Mexico self-control does not shine as an overmastering virtue, so that a perhaps disproportional place is occupied by the nonsocial phases of her life—her vices, crimes, and pauperism. For whatever their original roots, the development of all of these along characteristically national lines is certainly traceable to an almost uncontrolled acceptance of all the temptations which come to the individual or characterize his environment.

The chief vices of Mexico are three, all the result of unrestrained impulse: gambling, drunkenness, and sexual overindulgence. The last, which seems far more responsible for the Mexican lack of efficiency than any other single factor of the national life, is probably as much due to the climate and to overstimulating diet as to any special race tendencies in either Indian or Spaniard. But gambling and drinking have distinct racial correlations.

The Spaniard has always been the inveterate gambler of the world and a proverb in Mexico is to the effect that it is the Spaniard and the mestizo who gamble, and the Indian who drinks. The limitation is not literally true, for while probably the chief abusers on the side of gaming are those of mixed blood, no Indian, if he has any money, will miss an opportunity to bet on a cock fight or to risk a few centavos on a hazard of the open-air roulette wheel which is a feature of all his festivals. There were gambling systems in Mexico under the Aztecs, but it was the Spaniards who introduced gaming houses and the European gambling devices now in vogue. These came down through all the revolutionary epochs to that of Diaz, and "the casino" in Tacubaya, a Mexico City suburb, was as famous in its way as the smaller gambling palaces of Europe such as Enghien and Ostend. The Tacubaya casino was suppressed under Diaz, and the gambling houses in the city itself followed, so that after 1900 the capital was thoroughly "cleaned up." Gambling was openly revived under Huerta and it is said that in 1913 Huerta himself was the chief proprietor of the principal gambling houses open to varying classes of society. After his fall, unofficial gambling concessions were perquisites of many revolutionary "generals."

The clubs of Mexico have always been largely supported by their gambling tables, where roulette and baccarat were carried on, for the members only, even in the time of Diaz. This was the upper-class outlet for the gambling fever and the lower class

had to content itself with private games of "monte" and the little wheels at the *fiestas*, though from time to time one could find gambling houses running full blast for brief periods in large cities, and almost always in connection with popular fairs. Under the recent revolutionary governments gambling was allowed and even encouraged as a source of revenue, and in some of the states long persisted under government protection.

We cannot estimate the extent of gambling by figures, but before Diaz and since it has been rampant in a hundred forms. As this is written, the new fortunes of the "generals" of the recent revolutions are being dissipated in gambling as much as in the support of spectacular mistresses of the dance halls and concert stage, and the example extends on down through all classes. Great gambling halls (many of them in tents, to be sure, but elaborate and animated, nevertheless) fill the suburbs of the capital, and, although ostensibly under cover, are quite as open as need be. The gambling concessions of Tijuana (Lower California) and of Juarez, opposite El Paso, Texas, are known to all the sporting fraternity of the American continent.

Lotteries have run in Mexico for years, except for a short period under Carranza, the revival coming long before his fall. Throughout the Diaz régime two lotteries in the capital had government protection, for which they paid substantial taxes. A few state lotteries were also operated and the tickets for all of these were sold by stores and itinerant venders in every corner of the republic. There

were two drawings weekly of the national lotteries, and the prizes ranged from P500,000 down to P1,200, tickets for all drawings being sold in sections, some for a few centavos, and the percentage of possible gain was very little greater in proportion to the investment for the large drawings than it was for the small ones. In addition to the Mexican lotteries tickets for the Christmas and Easter drawings in Spain, the capital prizes of which were P500,000, were freely sold in Mexico.

Apparently the lottery filled a public demand for an opportunity to gain a few thousand per cent on a small investment. In 1907, when the Mexico City Tramways Company wished to keep a check upon its conductors and do away with their continual petty thievery, it devised a lottery scheme. In paying his fare the passenger received from the conductor a numbered ticket indicating the amount paid, and this was a possible winner in a monthly lottery in which the holders of lucky numbers were given prizes as high as P500. It was estimated that the lottery cost in the neighborhood of P5,000 per month, but as long as the novelty lasted the company apparently felt well repaid for this investment, because at first every Mexican who rode on a tram demanded his ticket in return for his fare, on the distant chance that his six centavos might win him a prize of P10.

In approaching the subject of drinking, it must be pointed out that most decidedly the upper and even the middle class Mexicans are in no sense slaves to liquor. There is, of course, much drinking

at Mexican festivals and in Mexican homes, but this is done much as drinking is observed in Europe—that is, a light wine with the meal and cognac or liqueur following dinner, or a heavier wine and cakes as a refreshment.

But all who know the Mexican Indian describe his consumption of alcoholic liquors as the chief feature of his festivals. In Mexico City the *pulque* saloons are the centers of the celebrations and of the mournings of the Indians and the peons. On holidays the drinking begins on the night previous and continues until the festival is over, as, for instance, from Saturday night until Monday morning, which accounts for the proverbial inability of the Mexican to work on Monday, which is celebrated gloomily as *San Lunes* (St. Monday's Day).

The attitude of the educated people in Mexico toward this overindulgence in liquor is extremely tolerant, due to custom and also to the fact that drunkenness is regarded as a form of comfort that it seems cruel to deny the unhappy Indian. The attitude of the Mexican toward intoxicating liquors is, indeed, not complicated by any moral code or deep appreciation of the laws of hygiene. Even the higher classes regard the use of stimulants as natural, and the climate is always the handy excuse for indulgence. On the plateau one needs a *copita* to stir one's energy in the lethargic hours of the day; in the hot country it is perilous to take cooling drinks unless they contain alcohol "to warm the stomach after its sudden chill."

The Spaniard is said to have introduced alcohol

drinking among the Indians, for previous to the colonial epoch control was theoretically very strict, only the nobility and old people being allowed to imbibe even *pulque*. The native liquors of Mexico are most of them (excepting rum) made from various species of the great-leaved *agave* (the aloe, or century plant), which also gives Mexico her chief agricultural product, the henequen fiber. The native distilled liquors are *mezcal* and *tequila* (an especially esteemed form of *mezcal*), made from minor members of the *agave* family, and *aguardiente*, the native name for the rum made from sugar cane. The chief fermented drink is *pulque*, manufactured from the sap which the lordly *maguey*, the king of all the *agaves*, pours forth in endless gallons when, just before flowering, after seven years of growth, the root of what would be a fifteen-foot flower-stock is dug out. This sap, cured by traditional and none too cleanly processes, is drunk in vast quantities by the natives of the plateau country. As it has to be drunk at a certain stage of fermentation, fortunately for the rest of Mexico it cannot be shipped off the plateau, and is known only in the Valley of Mexico and in parts of the plateau states of Puebla, Hidalgo, Tlaxcala, etc. While *pulque* is a decided intoxicant, according to Mexican medical theories the stupor which results from drinking it is due more to the continuance of the process of fermentation in the stomach and the consequent setting up of a toxic condition than to the mere presence of alcohol.

The effect of the enormous consumption of *pulque* is a byword among all who have had to deal with

laborers in the highlands of the republic, undoubtedly much of their stupidity, inefficiency, and unreliability being traceable directly to the enormous consumption of this debilitating beverage. Not least of its accompanying evils, however, is the devotion of thousands of acres of the finest land of Mexico to the raising of *maguey* plants for its manufacture. The *pulque* trains which come into Mexico City each morning total daily more than 100 cars, many times the milk trains which are puny rivals of the *pulque* traffic. More than P20,000 a day passed over the counters of the 2,000 vilely dirty *pulquerias* (or *pulque* saloons) of the capital during the time of Diaz, and the government revenue from the business was nearly P1,000,000 a year. Under Carranza, the *pulque* traffic, like the lotteries, was temporarily suspended, but was revived, owing to the need of revenues, heavier taxes raising the retail price from the three to four centavos a quart which it commanded in the time of Diaz to eight and ten centavos. The total production of *pulque* in Mexico under Diaz was about P8,000,000 annually.

The production and local consumption of distilled liquors totaled in 1910 about the same as that of *pulque*, some P8,000,000, while importations of wines and liquors were worth nearly P3,500,000. There was a growing use of beer, the manufacture of which the Diaz government encouraged as a measure against *pulque* drinking, but the total consumption was relatively low as compared with *pulque* and distilled liquors.

The abuse of alcohol on the part of the low-class

Mexicans can hardly be overstated. One of the keenest and frankest Mexican analysts of his people has written of them:

When a Mexican has any trouble he goes to a *pulqueria* to talk it over with a friend. In the morning he likes his *copita* for a starter. Children taste alcoholic drinks out of their fathers' glasses. On fête days bloody assaults are frequent, due to drunkenness. Mexico used to be free of the sight of a drunken woman up to 1876, but since then, unfortunately, the increasing proportions are alarming. To-day we have a national type of psychiatric (men and women). They particularly drink *tequila* and do not show drunken effects, but their nerves are shattered, their disposition becomes most irritable, everyone annoys them, a look from anyone seems insulting to them. Their eyes are dejected, their hair is thin (men lose their beards), their color is yellow, the pulse is shaky, they are nauseated in the mornings, they eat only meat and rice, they work only in a cloud of smoke and alcohol.[1]

A movement toward temperance in Mexico and even toward the prohibition of the sale of intoxicants gained some headway under Carranza. It was largely political, but there was surprising lack of opposition, and Mexican liquor dealers frankly admit to-day that national prohibition is only a matter of time. Probably no country would respond so splendidly to such a change, for not only would the health and spirit of the people benefit, but enforcement would be easy. The Mexican of the lower classes is accustomed to taking what is given him, and if liquor is taken away from him he would doubtless accept it with the same stoicism with which he accepts everything else.

[1] Julio Guerrero, in *La Genesis del Crimen en Mexico.*

Two Mexican states, Sonora and Yucatan, have tried prohibition, with some success, and Carranza's propaganda agents used the movement toward prohibition as a proof of his sincerity for social reform. But Diaz began the temperance movement, endeavoring to substitute beer, and beer of an excellent quality and comparatively low alcoholic strength, for *pulque* and for the more violent drinks which are used in those sections of the country where *pulque* could not be procured. As it was, a great deal was done in the middle classes. In fact, advocates of beer as a "temperance drink" could have found extremely interesting material in Mexico on the function which beer performed in aiding the establishment of a new middle class, for the use of beer working down from above undoubtedly tended to displace first *mezcal* and then *pulque* in the liquid diet of the regenerated workman.

While it was enforced, prohibition in Yucatan was fairly successful, although there was never any great difficulty in securing liquor if the price was forthcoming. In Sonora many reports were made on the reduction of crime following prohibition, the number of recorded arrests having dropped from 200–300 down to 30–35 per month in Hermosillo. Some difficulty in enforcement was, of course, experienced, and the price of liquor increased many fold, the quotation for a twenty-five-centavo quart of *mezcal* reaching three pesos, effectively quashing the tippling of the proletariat. Carranza was a stanch adherent of prohibition and when in the rev-

olutionary field he enforced prohibition as a measure of pacification—and punishment.

The extent of sexual overindulgence in any group is calculable through knowledge of the people and also through the secondarily important feature of the extent of prostitution. The Mexican's exceeding frankness in discussing sexual matters allows a very fair estimate from knowledge of the people. Primarily is the evidence of the attitude of the men toward the women, and, indeed, *vice versa*. The Mexican, of whatever class, never trusts his wife, or his friends with his wife, for the primacy of sex in the relationship between men and women he takes for granted, and, indeed, quite freely admits it as the reason for his seclusion of his wife from other men. The attitude of virtually all Mexicans toward women is expressed in the way they appraise their beauty and in the comments which one and all make on the women whom they pass on the street or see in houses, theaters, and ballrooms. The acceptance of this attitude by Mexican women is shown not only in the archness of their flirtation (which is seldom, if ever, "harmless" in the sense that the flirtation of an American or English girl may be almost without sexual significance), but in the care with which girls are watched over by their knowing mothers and in the mere fact that not even engaged couples are left unchaperoned.

Among the men and women of the lower classes, the sexual instinct is comparable only to that of animals, and is as frankly and openly yielded to. In the upper planes of society, the whole affair takes

hold of the national imagination and virtually monopolizes it, and the intellectual processes of most Mexicans, in their early years at least, are confined largely to the creation of fantastic erotic interests. Both the position of Mexican wives as virtual sexual slaves, and the maintenance of mistresses, are, in the first case, the result of the Mexican male's refusal to limit any impulse, and, in the second, of his search for the intellectual stimulus of variety and naughtiness.

The Mexican woman is not without her willing contribution to this devouring passion, and with the aid of the probably stimulating tropical climate has had her part not only in her own early wasting away, but also in the terrific drain on masculine vitality which has followed.

American life insurance experts in Mexico have frankly stated that probably the greatest element working against the "expectation of life" of Mexican applicants for insurance has been their willingness to waste their vital energies in sexual overindulgence.

To go no farther into the subject (which is not, however, to be discounted because it discourages enlargement), there are statistical phases which bear out the theory. Statistics on prostitution are not published in Mexico, but Judge Julio Guerrero, quoted previously, has set down his own conclusions on the basis of the figures available to him, as follows:[1]

In one typical year there were registered in the health records 699 *new* professional prostitutes (of whom 33 were forced to

[1] *Op. cit.*, p. 351.

register according to regulations of the health department) and there were discovered 2,809 clandestine ones. In this number are not included those who were discovered for the first time and warned against a repetition of the infringement of the law; of these there were about 1,000.

So, in one year there were 3,508 *new* prostitutes in the City of Mexico, or 1 per cent of the population. In order that these women live there must be a clientele of at least two per day, which means 7,016 youths who daily seek pleasure. And this does not represent the total, but merely the daily average. Multiply this by 365; 2,560,840 then would be more nearly the figure. Now divide this by weeks in one year, and we have a total of 49,232 persons who lead this sort of life weekly. The annual profits from this trade are at the least P5,000,000.

In approaching the subject of crime as such, it seems best to eliminate a discussion of all that may be called "political," although in that category are to be included thousands of examples of human passion and greed which are distinctly the result of the loosening of social control and are in no sense political or military. All of this, however, the Mexican blandly dismisses as "the fortunes of war."

Allowing, then, for all the vast loss of life, the innumerable outrages on women and children, the destruction of millions of pesos' worth of foreign and native property—not confined alone to the past decade—on the score of "political crime," there remain the two divisions of individual crime, those against property and those against persons.

Normally, the crimes against property are chiefly of a minor order. In olden days banditry was common, and during the revolutions it has again become a recognized profession, either under revo-

lutionary banners or under none. When Mexico has had well-ordered government, however, there has been little housebreaking, there are few holdups, and almost all thievery is in the form of pilfering and pocket picking.

The Mexican seems to be honest in larger matters where he is convinced that it is worth while for him to be so; but in small affairs this code of honor completely disappears. The long apprenticeship in slavery and servility, the vast differences which at one time existed between those who had anything at all and those who had nothing have, of course, warped that sense of values, and to-day the Mexican conception of property is a thing so essentially personal and individual that the sympathetic student finds himself badly tangled when he endeavors to place definite limitations upon what belongs to one man and what to another in the Mexican mind.

Thievery is a recognized institution, and petty pilfering is almost universal among servants. Thus those who have lost anything usually demand of their servants first the return of the property, and, when the theft is vigorously denied, suddenly call for the pawn tickets for the goods, a ruse which is ludicrously successful in nine cases out of ten. The practice of the clerks who stole a sum about equal to their wages is significant of this same attitude in the higher classes, and the storekeeper who did not raise the wages of these clerks because they would only steal more was a student of Mexican psychology.

During the viceregal days theft was punishable

by death even when the amount stolen was very small, and under Diaz service in the army was the prompt fate of pickpockets and other petty thieves. Severe penalties for housebreaking made this crime uncommon at least in times of peace, though this is surprising when one considers the ease with which thefts of this sort could be accomplished, owing to the flat roofs and the open patios of the houses. Housebreaking was not entirely unknown during the Diaz period, but as a custom it was not recognized among the thieving fraternity. This may be attributed to lack of personal courage, but it probably goes back to that fixed attitude of the Mexican toward life in general which prevents him from doing anything the possible results of which do not seem worth the risk. Under the revolutionary régime housebreaking flourished under the guise of military search. Those who lived through the various occupations of Mexico City and other towns discuss feelingly the difficulties which they faced in opposing the legal "searching" of their establishments. Among the soldiers the stealing of automobiles was common, the usual occasion being the retreat of one army or another, when rapid transport was in great demand. In the days of Diaz automobile thefts were uncommon, but the loss of bicycles and any other small pieces of property was almost inevitable if they were left long unattended.

The pilfering which is common in Mexico may be due to a heritage from the communal life of the early Indians when all property was held in common,

but in a nation where political crime is rife, and where anything can be done by the powerful under full protection of law, one can hardly expect petty thievery to be eradicated without some decided reform of the methods of thought as well as the methods of administration.

Outside of the field of political crime there is comparatively little wanton destruction of property. However, the wooden and steel shutters which covered the windows of all shops at night, even in the time of Diaz, indicate that in boisterous mood the peon enjoys nothing more than a bit of playful destruction—though usually with the idea of stealing what might be exposed. Not even the sequestration of important parts of machinery, which is common in Mexico, can be ascribed to destructiveness. The few centavos which the peon can get for a bit of brass bearing which is vital to a delicate machine, or the saving to himself by the sandals he cuts out of a great transmission belt, is quite sufficient to induce him to destroy the efficiency of either piece of property. The theft is all that comes to his mind, and in an analysis of motives thievery can be considered almost the only form, or at least the basic form, of all crimes against property.

Crimes against persons are classified as follows: Threats, attacks on the police, duels, homicides, infanticides, *injurias*, or slight hurts, *golpes*, or blows in which no blood is drawn (simple assault), and *lesiones*, or blows in which blood flows (assault with intent). There is a great difference in the serious-

ness of the latter two offenses. Where blood is drawn, whether by pistol, knife, or the fists, the law of Mexico regards the offense potentially as equally serious, a correlation of the English mahem, or disfigurement, which is often interpreted with ridiculous hair splitting by Mexican judges. The result seems to be that the Mexican uses a knife or a pistol as freely as Americans or Englishmen would use their fists. The only escape from the danger of being accused of making a *lesion* is to do battle with the pedal extremities.

Drunkenness is not placed in the official lists of crimes in Mexico, although under the viceroys it was subject to severe punishment. During the time of Diaz it was taken as an index of guilt rather than a crime itself. This rule, as applied to the brawls which followed most *fiestas*, gave the police the reputation of being more interested in the amount of liquor consumed than in the crime itself, an attitude not entirely unjustified on their part, for a Mexican's bravado as well as his dangerousness is often in proportion to the amount of liquor he has assimilated.

Criminal statistics for Mexico are hopelessly incomplete and inadequate. Only in the Federal District have they ever been of record in any form which makes comparison possible between different years. In the following table, prepared from data obtained from unpublished records of the office of the prosecuting attorney, the year 1897 is given as an index of earlier data, and that from 1906 down year by year. This is for the Federal District

alone, a section with a population varying from 540,000 in 1900 to 720,000 in 1910. The classification of *golpes* is translated "simple assault" and the more serious *lesiones* as "assault with intent," although not all *lesiones* are so serious, and should not be confused with the more exact definition of the English law's "assault with intent to kill."

	1897	1906	1907	1908	1909	1910	1911
Against Persons:							
Simple assault	51	152	222	187	258	163	....
Assault with intent	5,830	8,563	9,588	9,636	10,423	8,886	6,731
Homicide	102	139	127	145	239	148	108
Infanticide	....	2	1	1	....	....	....
Against Property:	....	3,530	4,445	5,318	5,545	4,884	....
Robbery	1,230	2,680	3,509	4,085	3,263	3,505	2,598
Abuse of trust	190	739	815	1,052	1,063	1,339	872
Swindling	26	111	62	72	93	....	69
Fraud and forgery	12	....	39	....	....	....	....
Attacks on Police	199	273	269	314	388	383	310
Men	....	10,117	11,387	12,473	12,428	11,494	8,904
Women	....	3,047	3,805	3,537	3,890	3,435	2,364
Total Convictions	8,106	13,164	15,192	16,010	16,318	14,929	11,268

The Diaz government collapsed in May, 1911, but the rule of Francisco de la Barra, lasting until the election of Madero in the fall of 1911, continued the Diaz régime virtually intact, although the falling off in the number of convictions in 1911 does show the loosening of the hand of the old system.

After 1911, however, the statistics of crime are more an index of the growing depravity of the police and court systems than as showing any such decrease in crime as the figures seem to indicate. In 1913, under Huerta, there were no records from January to June, and with this year also begins a notation which appears throughout the five years that follow, "the criminal escaped from prison,"

meaning that he was taken out (if he was not originally arrested for the purpose) to be put in the army which happened to be in control of Mexico City at the time. The year 1914 was one of military occupations, and in 1915 the courts were closed and no records kept. In 1916 the courts were being reorganized, and in this year and in 1917 and 1918 the usual Mexican habit of making all statistics appear for the credit of the government developed the "notable reduction in criminality in the capital" which was reported by the Carranza propagandists. The figures for these later years are as follows:

	1912	1913	1914	1915	1916	1917	1918
Against Persons:							3,482
Simple assault	....				444	223	....
Assault with intent	5,330				1,900	2,506	....
Homicide	157				45	71	....
Infanticide	....				....	....	....
"Injuries"	....				328	215	....
Against Property:	2,694				....	....	1,903
Robbery	2,025				1,862	1,332	....
Abuse of trust	608				219	140	....
Swindling	61				....	....	....
Fraud and forgery	....	Eight months only	Military occupations	Courts closed—no data	18	4	....
Attacks on Police	303				23	25	140
Men	7,203	2,636	2,448		3,540	....	....
Women	1,836	847	720		1,593	....	....
Total Convictions	9,039	3,483	3,168		5,133	....	5,510

Although the difference in laws, procedure, and classification make exact comparisons between Mexico City (which comprises, in population, most of the Federal District whose crimes are listed above) and other cities impossible, it will be illuminating to make a rough table of Mexico and cities of about the same size in the United States. The year 1910 is taken.

	Mexico[1]	San Francisco	Detroit	Buffalo	Pittsburgh
Arrests		32,914	17,875	22,203	39,151
Criminal assaults. . (Assault and battery)	8,886	1,139	908	919	107
Homicides	148	94	17	21	6
Against property	4,844	1,118	1,187	1,725	.....

On the whole, Mexico under Diaz was a well-policed city, for Mexican justice was quick and fairly sure, and the police and penal systems were relatively efficient in the Federal District. Almost the only difficulty experienced under Diaz in the preservation of order was the failure or refusal of the public to make complaints, a condition due not alone to a feeling of class loyalty, but more often to the complications resulting from the persistence of the Spanish code. This was as likely to lock up a witness as the criminal himself, for both were considered equally important for the purposes of justice. Aside from the legal code, the provisions against crime took on chiefly the nature of the control of the sale of alcohol and the vagrancy laws. As noted above, complete prohibition of the sale of liquor has been tried in two Mexican states, with reported success in the repression of crime. The control of the liquor traffic under Diaz was largely confined to the regulation of the hours in which it was sold, and attempts to enforce the law regarding its sale to intoxicated persons.

[1] Number of arrests is not available. In 1912, 26,471 persons were tried for various offenses, 9,039 being convicted. The convictions for 1910 were 14,929, so that by the same proportion about 39,000 were tried. Arrests were doubtless much higher.

The vagrancy laws of Mexico have comparatively little enforcement even to-day, for industry covers a multitude of occupations, so that in a debate with a policeman, even if not before a judge, a peon can call himself employed at honest labor when he is selling bird seed at one centavo a thimbleful from a stock which he can hold in one hand. Vagrancy laws are used, as elsewhere, to simplify the arrest of drunken peons who have no means of support and are too intoxicated to invent one.

The penal system in Mexico is largely of Spanish and French origin. Imprisonment is the usual punishment, for fines mean only imprisonment to the indigent peons. In the early days the jails were usually churches, monasteries, or colonial fortresses, and many ghastly crimes were committed in the name of justice. During the time of Diaz, however, education and labor were introduced into the prisons and there was a rapid elimination of some of the abuses which had heretofore been common. But much that was unworthy remained. The old prisons, such as Belem in Mexico City (now destroyed) and San Juan de Uloa at Vera Cruz, were famous as much for their unhappy surroundings and unhealthful environment as for their success in spreading crime through the nation. The hundreds of prisoners (the daily average at Belem was 4,000) were confined in common rooms practically without any accommodations, and vermin and vile conversation filled them day and night. The result was the transmission of disease and the inevitable demoralization of young offenders by the hardened

criminals who were the habitués of the place. Prison conditions are most deplorable in Mexico, and the improvement even under Diaz was very slow. Conditions like those at Belem were common in all city prisons throughout the republic, and uncounted harm has undoubtedly been done by the persistence of this type of jail.

The modern penitentiary at Mexico City (capacity 700) is, however, equipped with workshops, baths, and hospital; each room is provided with sanitary conveniences and running water, and light penetrates all the cells. The food is scientific and ample, and the entire system is so complete that the architecture of the building and much of the administration have been copied in other countries. Some of the states also have penitentiaries approaching modern standards.

Prison labor has been common in Mexico since the colonial period, and during the time of Diaz criminals did considerable work on the roads under guard, and factories within the prison walls turned out goods of value to the community, although in many places the energy of the prisoners was still devoted only to making worthless knickknacks to be sold to visitors. Some reform schools have been established, the Correctional School for Boys in Mexico City housing 400, that for girls 200.

There is a death penalty for murder in most Mexican states, but previous to the revolution, Campeche, Yucatan, Puebla, and Nuevo Leon had abolished it. In the Federal District in 1906 there were 139 convictions for murder, but only in 17

cases was the death penalty ordered, and in only 2 was it carried out. Executions in Mexico are by shooting and are held privately, as a rule, in the prison yard.

Deportation for crime was a common method of punishment during the Spanish days, and Diaz continued this, the "administrative" handling of some criminal cases being a recognized part of the Mexican penal system of the time. Some criminals were fined or sentenced to imprisonment and were then "allowed" to work out their punishment on the hot-country plantations. The Yaqui deportations from Sonora to Yucatan were not supposedly in the form of expiation of crimes, but were excused on the ground of "military necessity." Pickpockets were usually sent to the army, this punishment being effected by administrative order and not by court sentence, and justice of this sort was quick and very sure.

Ranking with the national vices and with crime, pauperism is one of the great sociological realities of Mexico. It is manifest in the fact that a vast portion of the population lives out its life in the direst poverty. It is visibly demonstrated in the thousands of beggars, in the starving children who to-day dot the country from the Rio Grande to Guatemala. It is the one problem which cannot be hidden and which no statistics of national prosperity will cover. Its causes are many, beginning with the climate, which gives neither stimulus to energy nor easy living, while yet tempting the native always with the promise of comfort and the

invitation to dreamy laziness. The racial mixture has no tendency to raise the Mexican above the poverty line, and his inherited disease, his unfortunate diet, and the vices which mark his habits of life, all drag him down. Illiteracy reduces his possibilities for advancement, and the political conditions which he pulls down about his ears at inevitable intervals throughout his history destroy all that long industry and the rare ambition of his aristocrats have built for him.

The outward index of the pauperism which this induces is the beggary which marks all Mexico. Beggars swarm, blind and halt and sick, all filthy, some licensed and filling the streets each day, the majority unlicensed and thus pouring out only on the Saturdays and feast days when the laws are relaxed. The chief charities of Mexico are not hospitals and formal poor farms, but private bread lines and private asylums for the wretchedly poor, and the Church has devoted its funds, sometimes great and sometimes small, to the care, chiefly, of the poor—and the poor in Mexico means the paupers, the miserable, filthy, half-human waifs of every age who have been left behind in even the relatively mild race for sustenance in Mexico.

In the matter of pauperism, however, statistics fail us again. The occupational census of 1910 showed ninety-six professional beggars in all Mexico. The total number of defectives reported in 1910 was 31,245,[1] and there are no adequate figures covering the number of persons in institutions, owing once

[1] See p. 106

more to the ancient quarrel between Church and state which makes it necessary for the Church to conceal its charities as well as its school attendance.

There has, however, been not a little government charity. The taxes on the lotteries in the time of Diaz were devoted to the funds for the poor, the Federal government's budget for charitable institutions and succor being slightly over P1,000,000 annually, the number of persons receiving help, either as inmates or as temporary patients, averaging 4,000 a day. Practically all of the Federal government's charity was expended in the Federal District and thus chiefly for the poor and indigent of Mexico City. The following are the chief government charitable institutions, all in or about the capital:

General Hospital, opened in 1905; capacity, 1,000; average number of patients, 686. Juarez Hospital, for prisoners and typhus patients; average number of patients, 684. Morelos Hospital, founded in 1582, now devoted to the care of fallen women; average number of patients, 349. San Hipolito Lunatic Asylum for men, founded in 1567; average number of patients, 151. Lunatic Asylum for Women, founded in 1698; average number of patients, 388. Public Dispensary; average consultations, 225 daily. Hospital for Epileptics, at Texcoco; average number of patients, 60.

Children's Home (*Hospicio de Niños*), founded in 1763, its modern building being one of the show places of the capital; capacity, 1,000, boys being double the number of girls, as the boys are dismissed at the age of sixteen, the girls being kept

until they are thirty-one unless outside opportunities are offered them. Foundling's Hospital, founded in 1767; average number of infants, 134.

National School for the Deaf and Dumb, founded in 1866; average number of students, 66. National School for the Blind, founded in 1870; average number of students, 76.

Most of the older institutions listed were originally founded by the Church, but were taken over by the government under the Laws of Reform. In 1899 a law authorizing private charities was enacted, making their operation completely legal and making the government the patron of all institutions thus officially recognized. The following are the chief of these:

Monte de Piedad, known as the national pawnshop, although founded in 1775 by the Conde de Regla. In the time of Diaz the new pledges averaged P500,000 monthly.

Hospital of Jesus of Nazareth, founded by Hernando Cortez, 1524, and still supported from his estates; for contagious diseases. Concepción Beistegui Hospital, for sufferers from chronic diseases; average number of patients, 100. Ophthalmic Hospital of Our Lady of Light, free to sufferers from eye troubles.

Casa Amiga de la Obrera, a day nursery founded in 1887 by the wife of President Diaz, for the care of children of workingwomen; average attendance, 300. Private Home for Beggars; the aged receive a home, the younger are taught trades; founded in 1879, since which date 5,000 have received its care,

there being, in February, 1908, 180 old people, 91 boys, and 73 girls. Home for Regeneration of Infancy, a rescue home for fallen women, where trades are taught.

There are a number of other private charities, of many sorts, including the three important American, British, and French hospitals, perhaps the most modern and efficient in the country. The Spanish and German hospitals, though without the modern hospital buildings of the American, British, and French institutions, are well managed and far above the usual private Mexican hospital. The Church hospitals and charitable institutions were fairly numerous in the time of Diaz, but all were of a relatively small capacity.

Since the recent revolutions, many of the charitable institutions here listed have been emptied and the buildings used for barracks, the unfortunate inmates adding their misery to the poverty and destruction of war. As always, this temporary upsetting of the slow structure of centuries is only noted—one must look on Mexico as having at least the potentialities of all that she once gained.

Under Diaz some beginning was made in providing pensions for aged and injured government employees, but this had not passed beyond the stage of special legislation or executive grants. Some of the foreign companies have begun pension systems of their own, and the Federal Constitution of 1917 has elaborate provisions for the payment of damage claims by employers to workers injured or incapacitated in their service. As this is written the pro-

visions of the labor laws in this, as in most other phases, are being used chiefly as a means of extorting money from employers either for the corruption of government officials or in more open blackmail. Readjustment will doubtless come with the improvement of the personnel of the courts and the law turned to its proper channel of protection of the honest worker. This should have a truly beneficent effect, as heretofore such indemnity as employers paid an injured worker was always spent on a *fiesta* or a series of *fiestas*, and did nothing to relieve the country of the support of the unfortunate. Much administration will have to be arranged for the handling of such benefits as should be given the workingmen, in order that these may relieve the state of the burden of pauperism.

Life insurance made considerable headway under General Diaz, three of the large American companies having agencies in the country and one of them a great office building in Mexico City. There were also two large Mexican companies, established during the same period. The revolution caused the withdrawal of all the foreign companies before 1916, and one of the Mexican concerns has recently closed out its business. Life insurance was never a national habit, however, and its beneficiaries were confined almost exclusively to the upper classes, the smallest policy written by the American companies, for instance, being P4,000. The Mexican companies tried some of the popular forms of insurance, but created little business among the lower classes, and little industrial insurance was carried.

With the sorry pages that record Mexico's crime and poverty, our survey of the living conditions of the Mexican people ends. The chasm of her faults is deeper and muddier than the paths of her normal life, and yet they seem but little different. Life is always close to its lowest ebb in Mexico, and what has been set down in this chapter is probably more intimately related to the normal conditions of the country than are such data in other lands. The faults and defects of Mexico are not swept behind administrative doors; they have always been everywhere in her life, for all who would to see. Figures are often made to lie, much omission seeks to cover serious faults, but always the misery and the poverty and the vice are inescapable facts. They belong to Mexico, to the lethargy of her past and to her present suffering, but they point clearly the ways which her regeneration must follow. Appalling they may be at first sight, but at least they are all before us, and before those strong, devoted Mexicans who are ready, in spite of them, to take up the thankless burden of the nation's regeneration.

XII

CONCLUSION

THROUGH years of tumult and disaster, through years of peace and rebuilding, Mexico ever and forever mixes and restratifies again, oil and water and ether. The experiment has seemingly lasted long enough for the realization of this to be complete, yet she always seems trying again, always the same stirring, always the same restratification, but never through it all a recognition of the ultimate impossibility of the one ideal she clings to—racial amalgamation. As we look on at this physical and political mingling of races, the hopelessness of a radical and immediate settlement eternally sends us wondering back to the questions of whether, had the Spaniards never come, Mexico might not be better off to-day, of whether, with greater immigration, she might not have been a whiter and a better land, of whether, if we should leave her to herself, she might not be able to work out her own salvation.

But the elements of the problem are the elements of the solution, in the forces which are to-day actually existent. We cannot speculate on a greater white immigration because it has never come

and is at present climatically and economically impracticable. Our other speculations are one and the same—Mexico, in her "working out" has been tending rapidly back toward that very Indianism. We cannot consider the wisdom of letting her go all the sinister way back to her ancient barbarism, because the great outstanding fact of the present is that Mexico belongs to the modern world, and the modern world has vital need of her. She cannot be allowed to slip back nor may she confine herself within jealous borders. No man can choose, for forces mightier than men have chosen, and history and industry have pushed Mexico to a place from which she can never retire.

To face this truth is Mexico's problem. For the solution there is but one force within her people, the mighty element which has ever rescued her from her great failures—her own true aristocracy. The existence of this group is the one fact of substantial and reassuring importance in Mexico to-day. This element, the true social élite,[1] the one vital power in all human governments, has long existed in Mexico, surviving revolutions and disaster, rebuilding her after each of her social and political debauches.

Mexico's true aristocracy traces its descent, as

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[1] This true aristocracy rests upon deeper stratifications than caste rankings. From modern sociology we may take the names and character of Mexico's four "true social classes": (1) the *true élite*, those who help, inspire, and lead; (2) the *nonsocial* classes, marked by narrow individualism; (3) the *pseudosocial* classes of parasites and paupers; (4) the *antisocial* or criminal classes.—Cf. F. H. GIDDINGS, *Principles of Sociology*.

surely as does her aristocracy of caste or class, to the colonial Spaniards. Among the mass of scheming, struggling white men who were the pioneers of Mexico were many great teachers and many philanthropists whose benefactions and foundations survive to this day. In the laws of the Council of the Indies and in the rulings of the viceroys are records of a true attitude of altruistic protection of the Indians, edicts enforced so thoroughly that to this day the simple peasant of interior Mexico cannot conceive of a white man who is not his protector, or of a priest who is not a devoted missionary to his welfare.

Deep and well built the Spaniards, and when, seventy years after the first revolution, Diaz made opportunity for the true élite to serve again, the great example of the viceroys was before them; under Diaz there was a truer expression of altruistic and conscientious government than Mexico had known since the viceroys or than she has seen since Diaz fell.

The true upper class has never yet been the product of the so-called democracies which are forever drenching the country in blood. Indeed, the most sweeping and condemnatory criticism of the Mexican aristocracy (the true élite as well as the upper social class) is that it has not taken part, nor does it take part to-day, in the political activities of the country. This charge is true, and its failure to do so is primarily in the fact that Mexican politics is a politics of the rifle and the machete, so that the power in Mexico from the exile of the

Spaniards almost continuously has been in the hands of the mestizo agitators. This condition has been compared by one of the creole exiles to the situation in the southern United States following the Civil War, when the aristocrats were powerless under the domination of carpetbaggers with negro hordes at their back. This Mexican begs us to remember that "the carpetbaggers of Mexico have experience and traditions rooted as far back as colonial times. They have the shrewd and subtle wit of the Indian combined with the grandiose words of modern civilization, with which they have gained the sympathy of uninformed outsiders." [1]

These "carpetbaggers," the nonsocial leaders, have dominated Mexico from the fall of Diaz to this day. The Madero revolution, in its inception, was the upheaval of a group of intellectuals, and its primary object was the infusion of new blood into the aristocracy. But the idealism was short lived, for to attain his ends Madero had accepted the aid of the unsocial elements of all Mexico, and when he became president the carpetbaggers moved into the departments, into Congress, into the army, and as officials, deputies, and generals began their long debauch of blood and thievery. To-day, thanks to this element, the true élite is almost nonexistent within Mexico's borders. They have been driven out at the points of guns, and by their own pride and unwillingness to bow their heads or to prostitute

[1] T. Esquivel Obregon, "Factors in the Historical Evolution of Mexico," in *Hispanic-American Historical Review*, May, 1919, p. 171.

their ideals to the dictatorship of the nonsocial elements. The narrow individualism of the new rulers, their concentration upon the momentary fruits of victory, their sense of their own ineptitude and therefore of need for immediate and colossal pecuniary and social success, are dominating present Mexican history.

We have seen much of them in the past, and we shall doubtless see even more of them for yet a little while, in the future. No Mexican President has yet climbed to power save by being one of them or by using their methods. Although the day of Diaz has passed, the world still seems to cling to the fond hope of the uprising from within this nonsocial class of such a man as Diaz was in his youth. Diaz indeed rose to his power by his manifestation of the "iron hand," but those fail dismally in understanding Mexico who believe that Diaz maintained his hold by that means, for Diaz's hold upon Mexico was in his tolerance and in his conception of the obligations and duties of the world's true aristocracy. A newer day has yet to dawn, when tolerance shall not wait upon force, and the miracle of Diaz shall not be a nation's hope.

While the "carpetbaggers" represent the nonsocial class in Mexico at its worst, the mass of the population, with its apathy, its selfishness, and its short-sightedness, makes up the great bulk of the nonsocial, narrowly individualistic group. In all countries this is true, but in Mexico it seem grievously aggravated. The millions of Indians, the long-suffering, self-pitying (or grafting) middle

class which accepts and supports each government as it rises and rushes to the next when it falls, offer a problem that none but the most devoted of aristocracies can even face. No election (save possibly that of Madero) ever brought out 10,000 voters, no Mexican long engages in revolution for an ideal, and no social reform was ever achieved save by the force of the aristocracy or the foresight of the foreigner. Truly, the mass of Mexico, nonsocial, inert, remains a problem even without the depressing example of the selfish horrors of the "carpetbaggers."

Under Diaz, as under all previous Mexican governments, the pseudosocial class of parasites held an important place. In Mexico these are not merely paupers; they are parasites of government, the officeholders, the so-called "bureaucrats," who have been the nation's scourge since the days when the illegitimate mestizo sons of Spanish officials crowded the anterooms of viceroys and bishops. Every revolution in Mexico, and increasingly each uprising of new chieftains, has added to this number by its destruction of the opportunities for honest livelihood, and by the destruction of that middle class of artisans, clerks, and storekeepers which peace has tended to create.

Thus, too, the antisocial class has been swollen by each new destruction of the chance for simple human existence. In the revolutions of the middle of the last century, peaceful peons learned the ease of the life of bandit and thief, so that one of the greatest problems which Diaz faced was the re-

forming of the Mexican mind to conceptions of life other than living at the expense of the community. To-day again, one of the great problems of Mexico is the winning back of the people from ideas of life by violence to conceptions of civilization which do not glorify robbery, murder, and rape as they are to-day glorified, under revolutionary rule, from the National palace to the peon's cornfield.

In the chapters which fill these pages we have watched the unfolding of the life of Mexico as it has been built and broken, erected again, and again tumbled to the dust, by the interaction of these four kinds of Mexicans, separated from one another as are the four winds, yet converging together to the whirlwind which has been their history. We have seen their heredity and their environment, with race as the determining fact of the one, and climate the outstanding element of the other. The racial background is the two great elements of Indian and Spaniard, manifesting themselves in the making of the mestizo, in the determining of the population, in the health which makes their attitude toward life and civilization, in the caste system which so unerringly records what they think of themselves. Four great conditions of environment we have seen: climate, the community, religion, and education. We have looked at the social matrix of the family, its homes, its food, its clothing, and its cleanliness. We have measured the economic environment of labor, of income, and the cost of living. We have plumbed the unsocial manifestations, vices, crime, and pauperism.

For heredity and environment are the making of life, and never did a people have a more definite heredity, and never a more clearly chiseled environment. He ventures far who dares guess which is the more important, but he fails miserably who, in Mexico, at least, would underestimate the mighty influence of race as reflected in a national life which responds like a chemist's balance to each drop of blood, white or red.

The race phase has the most definite relationship to the world without. In the days of the white Mexicans, under Spain and under Diaz, the land was developed and made great by help from outside herself; she was part of the white man's world. In colonial days the Spaniard built her solid civilization, and under Diaz the foreigner was welcomed and made, by his own success, a part of the success of Mexico. Before Diaz, and since his fall on down to to-day, the mestizo and Indian have ruled. In these times there has been manifested a bitter antiforeignism that is distinctly racial. No Mexican now speaks as did those of Diaz of a welcome to foreigners, of a willingness to let them help in carrying the white man's burden in Mexico. To-day that attitude is dead—we need seek no apologies or explanations. Always the mestizo, jealous, conscious of an inferiority, has opposed white immigration and white development. He called the Diaz efforts to bring white colonists "manifestations of consanguinity," wrecked the Italian colonies through bureaucratic machinations, and finally wiped out the great Mormon settlements

in Chihuahua by giving them to Indian armies for loot. The mixed bloods and the Indians want no aid of the white world—Mexican or foreign—in working out their problems.

But Mexico lives in the world of to-day. Her resources, her gold and silver and oil, her henequen and rubber and coffee and lumber, her great labor supplies that wait so surely upon education and uplift, are forces which the white world cannot ignore—save to turn them over to the yellow. Mexico cannot live in isolation, for her lands lie in the very heart of the world and her raw materials are sorely needed on all the seven seas. Diaz recognized this, as did and do the great men who were around him, and upon it they built a nobler patriotism than Mexico had ever known, a patriotism that saw Mexico in its place among the nations, not as a separate, isolated, ingrowing people eking out an existence amid barren hills whose wealth they have not the energy or capital to uncover. The true, broad patriotism of Mexico will draw the power of the world to its development, resolute, unafraid, conscious of its people's possibilities and of her power to unfold them.

In these days of radicalism and internationalism, the word patriotism is likely to have an unwelcome sound, but the idea of patriotism is as mighty as it has always been. Upon its foundations have been built all of the Mexico that was permanent; upon it must be built all the Mexico that is to be. Mexico's last page has not been written, nor will it be while there are ideas that can revivify it,

institutions that can rebuild it, and men who can lead it.

In the mass, the Mexican crowd rejects ideas, even though its individuals cling to them and weigh even their supremest moments in the scales of mind; ideas, then, must become the fabric of the patriotism of the crowd—ideas of service and of co-operation, ideas of education. In the mass, the Mexican crowd gazes in dull apathy at institutions and knows not what they are, and yet because the Mexican crowd is what it is, because the Mexican individual is what he is, institutions are a greater need to Mexico than to any other people in the world; institutions, then, must be given her—institutions of honest government, of learning, of manual education, of uplift and clean joy. In the mass, the Mexican crowd follows a leader, and in the individual the Mexican loves a master who knows and understands him. A leader, a master, then! An aristocracy of those who understand and love and serve as well; an aristocracy fed deep with ideas, giving them out, growing with them and with its people; an aristocracy with institutions, a great, free institution of honest, devoted government, institutions of learning where true leaders, ever renewing themselves, may be brought up, schools where hand and heart shall be trained together, where peon and aristocrat may meet, and understand each other, always.

Is it too much to ask? Too much to hope? Well, it may be, but this we know: that never since the earliest days of pre-Spanish history has Mexico

failed to be strong and great when her leaders or her institutions or their ideas were great and strong. And we know that never in all that history has Indianism, allowed to tread the measures of unwonted cultures, been aught save the clown, the buffoon, the tragic victim of its own incompetence. It seems, indeed, that the step upon which Mexico and the world make pause is clear. We know that the great Mexicans who alone must take up the burden of their country's regeneration wait, silent and uncomplaining, as they have waited these ten years, for the word of understanding and support which can come only from those in whose hands rests the scepter of the white man's world, that world to which they, as we, pay deep allegiance.

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